Chapter

1

BIGHORN NATIONAL FOREST

Revised Land and Resource Management Plan

Forestwide Direction

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Chapter 1

Introduction

The goals and objectives presented here are tiered to the USDA Forest Service Government Performance and Results Act Strategic Plan: 2000 Revision. This strategic plan presents the goals, objectives, and strategies that reflect the Forest Service's commitment to a sustainable natural resource base for the American people. All goals and objectives fall under the overall mission of the Forest Service, which is to sustain the health, productivity, and diversity of the land to meet the needs of present and future generations. "Caring for the Land and Serving People" expresses the spirit of this mission.

The Forest Service's mission and strategic goals and objectives are derived from the laws defining and regulating the agency's activities. Goals, objectives, and strategies describe tangible progress toward achieving the agency's mission through implementing forest plans. These plans guide on-the-ground natural resource management to ensure sustainable ecosystems and to provide multiple benefits.

Goals and Objectives

Instead of the two-tiered Goal/Objective system defined in 36 CFR 219, this Revised Land and Resource Management Plan (Revised Plan) uses a three-tiered goal/objective/strategy process to tie more closely to the Forest Service Strategic Plan.

A **goal** is a concise statement that describes a desired condition to be achieved sometime in the future. It is normally expressed in broad, general terms and is timeless in that it has no specific date by which it is to be completed. Goal statements form the principle basis from which objectives are developed. The four goals in the Revised Bighorn Plan were derived from the goals in the 2000 Forest Service Strategic Plan.

According to 36 CFR 219, a forest plan **objective** is: “a concise, time specific statement of measurable planned results that respond to pre-established goals. An objective forms the basis for further planning to define the precise steps to be taken and the resources to be used in achieving the identified goals.” The objectives listed in the Revised Plan were derived from the objectives in the 2000 Forest Service Strategic Plan and do not met the CFR definition of objectives as they are not time specific or measurable.

The Revised Plan includes **strategies**, which correspond to the 36 CFR 219 definition of objectives.

Forest Goals and Objectives

Goal 1 – Ensure Sustainable Ecosystems

Manage to assure ecosystem health and conservation, using a collaborative approach to sustain the forests, grasslands, and watersheds of the Bighorn National Forest.

Objective 1.a: Improve and protect watershed conditions to provide the water quality and quantity and soil productivity necessary to support ecological functions and intended beneficial water uses.

Strategies

1. Attain or maintain water quality necessary to comply with state of Wyoming water quality standards in all streams on the Forest. Water must be of sufficient quality to support state-designated beneficial uses and healthy riparian, aquatic, and wetland ecosystems.
2. Complete watershed scale improvement projects, such as road relocations or improvements, on at least three 5th-level Hydrologic Unit Code (HUC) watersheds within 15 years. Annually complete an average of three watershed improvement projects in priority watersheds, such as road/trail stabilizations, culvert replacements and dispersed campsite management. Prioritize watersheds considered in degraded condition by Winters et al. (2003).
3. Within five years, develop and maintain a Forest Revegetation Guidebook to address seeding practices and other methods of restoring disturbed sites.
4. Measure status and trend of aquatic habitat conditions forestwide to develop baseline habitat objectives that evaluate the relative health or condition of aquatic habitats.
5. Within five years, identify and maintain at the 6th-level watershed scale, at least one representative area for each ecological subsection (e.g., sedimentary and granitic) on the forest as a barometer for baseline aquatic habitat conditions.
6. Manage for the structural and compositional diversity of native plant communities in riparian zones and wetlands.
7. Maintain, protect, and enhance wetland function and value when analyzing or implementing all projects.

Objective 1.b: Provide ecological conditions and habitat within the ecological capability and disturbance regimes of the Forest to sustain well-distributed viable populations of native and desired non-native emphasis species listed in Appendix C of the Revised Plan.

Strategies

1. Incorporate published conservation strategies for species at risk (Threatened, endangered and sensitive species and species of local concern listed in Appendix C of the Revised Plan) into project design as they are developed, conducting plan amendments when or if necessary to incorporate management direction.
2. Proactively conserve populations of emphasis species at risk by maintaining or improving habitat availability and quality when designing projects based on species' habitat needs. Provide diversity in habitat structural stages of forested vegetation and age-class diversity of non-forested vegetation, as needed.
3. Improve knowledge of the distribution of species at risk and their habitat by inventorying 10,000 acres or 10 species per decade. Work with conservation partners in the study, management, and monitoring of these species. Develop survey methods and initiate baseline and trend surveys for populations and/or ecological conditions of at least two species at risk in 5 years. Reintroduce native at risk plant species within their range as appropriate.
4. Provide adequate habitat to support populations of big game species according to population objectives developed in concert with the Wyoming Game and Fish Department. Treat 3,000 acres of big game winter range every 5 years to improve habitat value.
5. Where suitable habitat exists, cooperate with the Wyoming Game and Fish Department to reintroduce beaver (MIS) into three 6th-level HUC[1] watersheds over 10 years to re-establish self-sustaining populations in historical habitats. Use 6th-level watersheds (identified in Winters et al. 2003) having high potential habitat. Where feasible, seek to improve potential habitat through, but not limited to, livestock management, road management, and coordination with Wyoming Game and Fish Department on big game management. Coordinate restrictions on trapping or other removal of beaver with the Wyoming Game and Fish Department to provide retention of beaver populations.
6. Maintain or increase the amount of elk (MIS) security areas at the forestwide scale. Current level is 47% of potential. Assess availability of security areas at the geographic area scale, and incorporate security area analysis into travel and vegetation project management decisions to increase availability, where feasible.
7. Protect significant cave resources and associated wildlife through designation, development and implementation of three cave management plans within five years or until all significant caves have management plans.

[1] Hydrologic Unit Code

8. Maintain a forestwide system of old-growth habitat to sustain old-growth associated species and resources. Identify stands for each geographic area for management as old growth through remote sensing or field inventory. Prioritize field inventory of geographic areas where more widespread vegetation management treatments will be planned. Validate inventory of the Tongue River, Goose Creek, and Clear Creek/Crazy Woman Creek geographic areas by 2010.
9. The Revised Plan incorporates the conservation measures of the Lynx Conservation Assessment and Strategy. In occupied lynx habitat, implement applicable management direction for lynx habitat within Lynx Analysis Units on National Forest lands. Conduct surveys as needed and appropriate on the Forest to determine whether mapped lynx habitat is occupied. Review new information, such as critical habitat designation, or preparation of a Lynx Recovery Plan by the U.S. Fish and Wildlife Service, or the Northern Rockies Lynx Amendment, as it becomes available, to determine whether management direction for lynx needs to be amended.
10. Provide unobstructed routes to areas critical for fulfilling life history requirements of aquatic- and riparian-dependent species.
11. Manage riparian and aquatic habitat, including springs and fens, to support well-distributed populations of native plant, invertebrate and vertebrate riparian- and aquatic-dependent species.

Objective 1.c: Increase the amount of forests and rangelands restored to or maintained in a healthy condition with reduced risk and damage from fires, insects and diseases, and invasive species.

Strategies

1. Within 15 years, implement 447,052 acres[2] of vegetation management practices that will move all affected landscapes toward desired vegetation composition and structure. Vegetation management practices may include prescribed fire, wildland fire use, timber harvest, mechanical, biological, chemical, or cultural (e.g., livestock grazing) treatment, etc. Design management practices that maintain a mosaic of vegetative composition and structure emulating natural processes, patterns, scale, effect, and distribution of community types, age, and structure classes. Implement practices that attain the Desired Future Condition for forested age-class diversity as described in Chapters 1 and 3 of the Revised Plan. Emphasize the use of mechanical treatments on suited forested lands (Management Areas 5.11, 5.12, 5.13, 5.4, and 5.5). Acres treated may include or consider those listed in the strategies under Objective 1b (2) above.

[2] These are distinct or individual acres. Many activities may have multiple entries, even annual entries such as grazing, but are only counted in this tally once.

2. Strive to limit further expansion or new infestations of invasive species and reduce existing infestations of invasive species. Within 5 years, complete an invasive species management plan.
3. Manage to retain or increase aspen stands by treating 500 acres over 10 years. Treatments include commercial and non-commercial harvests to remove competing conifer and regenerate aspen; prescribed fire; and fencing, where needed.
4. Implement suppression strategies as needed to minimize epidemic outbreaks of insect and disease in areas managed for timber production, developed recreation, viewshed (e.g., concern level 1 and 2 roads, cultural sites, and wild and scenic river corridors) and administrative sites as described in management area desired conditions.
5. Continue to strengthen interagency relationships to increase wildland fire protection capabilities to provide for firefighter and public safety.
6. Place high priority on fuel reduction activities in Fire Regimes I, II, and III (ponderosa pine, sagebrush/grass, mixed conifer) and other strategic areas where high fire hazards exist, such as communities identified in the Healthy Forest Restoration Act (Federal Register, Vol. 166, No. 160, Aug 17, 2001) or as identified in community wildfire protection plans. Treatments should emphasize condition classes with one or more missed fire cycles and urban/wildland interface areas.
7. Within 15 years, complete wildland fire use implementation guidance supplements to the Fire Management Plan for all areas where wildland fire use is permitted, to allow the natural role of fire to be restored in the ecosystem.

Goal 2 - Multiple Benefits to People

Provide a variety of uses, values, products, and services for present and future generations by managing within the capability of sustainable ecosystems. Recognize the interdependence between the Bighorn National Forest and local communities. Consider natural and social systems across landownership boundaries, including land use patterns and open space.

Objective 2.a: Improve the capability of the Bighorn National Forest to provide diverse, high-quality outdoor recreation opportunities.

Strategies

1. Provide readily available information concerning recreation activities at offices, visitor centers, and other information sites. Provide up-to-date visitor information, including Tread Lightly!® and Leave No Trace outdoor skills and ethics for visitors.

2. Develop criteria and priorities for evaluating developed recreation facilities.
3. Prepare 2 vegetation management plans for developed recreation sites within 15 years.
4. Develop opportunities that highlight resource conservation education and promote them through visitor information services.
5. Provide nonmotorized and motorized trails/areas for a wide variety of uses and experiences. Develop travel management plans associated with the conversion of the remaining "C areas" to "A areas" (as shown on the 1998 travel map) within four years of plan revision date. When conducting C area travel management planning, consider the travelway system adjacent to the C area. Provide diverse trails for motorized and nonmotorized recreation opportunities in coordination with Wyoming State Trails. Provide a variety of hunting, fishing, and wildlife viewing opportunities in coordination with the Wyoming Game and Fish Department.
6. Express clear expectations of travel opportunities. Minimize conflicts among users.
7. Continue permitting outfitter/guide services on National Forest System (NFS) lands.
8. Encourage, establish, and sustain a diverse range of recreational facilities and services on NFS lands. Partnerships are one mechanism for accomplishing this.
9. Develop or identify one day-use trail system on a scenic byway within 15 years.
10. Provide for motorized and nonmotorized dispersed recreation opportunities.
11. Inventory existing rock climbing routes including approach, associated trail locations, and human impact. Within 10 years, develop climbing management plans for two areas on the Forest where routes are established or are being established.
12. When conducting travel management planning, promote the concept of loop trails, routes to feature destinations, connections between developed and private recreation attractions, and interpretive opportunities. Strive to minimize effects to motorized travel opportunities within the geographic area due to mitigations for elk security related route closures.
13. Where funding for new trailheads is not available, emphasize the construction of trails which would be accessible from existing trailheads.

Objective 2.b: Improve the capability of wilderness and protected areas to sustain a desired range of benefits and values.

Strategies

Wilderness

1. Monitor air and water quality, particularly in alpine lakes in coordination with appropriate state agencies.
2. Provide for human values and benefits while preserving the wilderness character.

3. Control and reduce the adverse physical and social impacts of human use in wilderness through education and regulation as needed.
4. Favor wilderness-dependent activities in wilderness. Discourage activities that are not consistent with wilderness values.
5. Manage special exceptions provided by wilderness legislation with minimum impact on the wilderness resource.

Heritage Sites

1. Negotiate programmatic agreements with State Historic Preservation Office (SHPO) and the Advisory Council for the timber and fire programs and historic administrative sites to emphasize inventory and management strategies within 15 years.
2. Assess identified sites eligible for the National Register of Historic Places (NRHP) in conjunction with SHPO and Tribal Historic Preservation Office (THPO) and provide interpretation for NRHP sites where appropriate and consistent with developed preservation plans. Reduce backlog of unevaluated sites by evaluating 50 sites in 15 years.
3. Inventory and evaluate 500 acres per year of the highest probable lands for cultural resources. Identify examples of the most important heritage site types, incorporate into a programmatic agreement, and nominate to NRHP.
4. Establish and maintain effective consultation with federally recognized American Indian tribes on traditional cultural properties as specified in 36 CFR 800.2 and National Register Bulletin 38.
5. In partnership with American Indian tribes and state, county, and local government, increase public awareness, protect heritage resources, and further the goals of research through education and interpretation.

Special Areas

1. Within ten years, develop and implement a management and monitoring plan for one Research Natural Area.
2. Within 15 years, develop and implement a management and monitoring plan for each heritage special interest area.

Objective 2.c: Improve the capability of the Bighorn National Forest to provide a desired sustainable level of uses, values, products, and services.

Strategies

Livestock Grazing

1. Provide forage for livestock while managing to meet desired conditions. Provide forage for livestock at a level that strives to maintain or exceed the year 2004 permitted stocking level of 113,800 Animal Unit Months (AUMs), while recognizing that stocking levels may be adjusted through the implementation of allotment management plans (AMPs) and administration of grazing permits. Annually adjust authorized stocking levels to assure that appropriate standards and guidelines are being met. As monitoring indicates it is needed, adjust permitted stocking levels to assure meeting or moving toward desired condition objectives in a timely manner. Authorize grazing of forage by domestic livestock that will maintain resource health while contributing to community lifestyle, tradition, culture, open spaces, and to the local economy. Strive to authorize grazing for domestic livestock that will provide stable livestock numbers and seasons of use.
2. Share information and cooperate with livestock permittees, state and private agriculture organizations, universities, and research partners to communicate improved technology and other applications associated with resource uses, utilizing livestock as a management tool.

Geologic and Paleontological Resources

1. Inventory for paleontological resources during cultural or other surveys.

Mineral and Energy Resources

1. Provide for environmentally sound mineral exploration, development, and reclamation in areas open to mineral entry and in areas with valid existing rights.

Special Forest Products

1. Provide appropriate opportunities for special forest products (e.g., posts, poles, seeds, etc.) through, sustainable, environmentally responsible harvest and collection methods on NFS lands.

Scenery

1. Manage to rehabilitate and enhance landscapes viewed from the scenic byways. Within scenery management areas (MA 4.2), treat an average of 700 acres of forested vegetation every 10 years to maintain scenic quality through time. Coordinate treatment of the viewed area across management area boundaries.
2. Outside MA 4.2, manage for high quality scenic landscapes consistent with forest plan desired conditions and scenic integrity objectives. Restore 10% of landscapes that do not meet scenic integrity objectives.

Short Duration Roads

1. When constructing new roads for projects, minimize creation of permanent roads by using short duration roads where public need does not warrant permanent roads.

Stewardship

1. Within the limitation of the small business set-aside program and while stewardship contracting authority exists, evaluate each vegetation management project for its potential and feasibility as a stewardship contract. Where appropriate, design treatments to facilitate stewardship projects. Other contracting tools may include timber sale contracts, service contracts, livestock permits, and special use permits and authorities.

Timber

1. Annually offer a reliable sustainable level of forest products (sawtimber, posts and poles, Christmas trees, and fuelwood) on forest lands.
2. Offer not more than the allowable sale quantity of sawtimber from suitable lands.
3. Strive to offer to the public sawtimber, products other than logs, and firewood at the average annual Total Program Sale Quantity.

Tourism and Recreation

1. Coordinate with local government entities on tourism or recreation opportunities.
2. Foster a sense of place unique to the Bighorns by appropriately integrating cultural resources and natural resources into education and recreation opportunities.
3. Provide a variety of hunting and fishing opportunities in coordination with the Wyoming Game and Fish Department.

Goal 3 - Scientific and Technical Assistance

Develop and use the best scientific information available to deliver technical and community assistance and to support ecological, economic, and social sustainability.

Objective 3.a: Provide assistance in building the capacity of Tribal governments, rural communities, landowners, and private citizens to adapt to economic, environmental, and social change related to natural resources.

Strategies

1. Promote state and private forestry economic action program authorities to provide financial and technical assistance to local communities and natural resource based businesses to pursue self-sufficiency and sustainability.
2. Provide support and assistance to communities to reduce wildfire risk, to communicate grant programs, and to enhance efforts to improve/protect watersheds.
3. Expand local economic opportunities on private, state, and tribal lands through federal, non-federal cost shares.

Objective 3.b: Improve the knowledge base provided through research, inventory, and monitoring to enhance scientific understanding of ecosystems, including humans, to support decision-making and sustainable management of the Bighorn National Forest.

Strategies

1. Continue and enhance inventory and monitoring systems on the Bighorn National Forest to provide information and decision support.
2. Provide research results and tools through technology transfer to support effective management, and restoration of ecosystems and sustainability of natural resources, for example the Region 2 Aquatic (Winters et al. 2003) and Terrestrial (Regan et al. 2003) assessments.
3. Pursue partnerships with Forest Service and University research, other agencies, cooperators, and volunteers to acquire high priority information and pursue monitoring needs.

Goal 4 - Effective Public Service

Improve travel management, provide a wide range of recreation opportunities, and maintain Forest facilities, buildings, roads, and trails in an efficient manner.

Objective 4.a: Improve the safety and economy of Forest Service roads, trails, facilities, and operations, and provide greater security for the public and employees.

Strategies

1. Focus efforts to improve travel management education, enforcement, and signing, including designating motorized and nonmotorized travel ways and areas, and identify reasons for restrictions.
2. Provide recreation opportunities to accommodate a wide range of abilities and activities and ensure non-discrimination in the delivery of Bighorn National Forest programs.
3. Maintain all objective maintenance Level 3, 4, and 5 roads to standard annually.
4. Maintain 20 percent of all objective maintenance Level 2 roads to standard annually.
5. Maintain 25 percent of all objective maintenance Level 1 roads to standard annually.
6. Decommission or incorporate unclassified Forest roads and motorized trails into the travel system through travel management planning.
7. Prioritize capital improvement, maintenance, construction, and reconstruction projects to reduce deferred maintenance backlog on all forest infrastructure.
8. Perform all facility and building construction and reconstruction, maintenance, disposal, and capital improvement consist with the Forest Facility Master Plan and the Built Environment Image Guide.
9. Reduce resource use (e.g., energy, fuel, water) in day-to-day Forest operations.
10. Actively pursue law enforcement or administrative actions on unauthorized uses. Incorporate an active public contact and education program into law enforcement efforts.
11. Identify and decommission 4 miles of system or non-system road, annually.

Objective 4.b: Provide appropriate access to the National Forest. Ensure proper verification of Forest boundaries.

Strategies

1. Maintain or increase legal access to the Bighorn National Forest.
2. Develop and implement a Rights-of-Way Acquisition Program in response to resource management programs and access needs.
3. Survey Forest land/line boundary location on a priority basis, as needs arise.
4. Acquire inholdings within the forest 1) on a priority needs basis, 2) as opportunities arise, and 3) with willing sellers.

Objective 4.c: Enhance the public services provided by the Bighorn National Forest through the pursuit of cooperation and public and private partnerships.

Strategies

1. Coordinate land management decisions and work in cooperation with other federal agencies; federally recognized American Indian tribes, state and local governments; and other interested or affected communities, groups, or persons.
2. Recognize and coordinate with County Land Use and Conservation District Plans as part of Forest management activities.
3. Provide opportunities for federally recognized American Indian tribes to participate in planning and management of the National Forests, especially where tribes have claimed special geographic, historical, or cultural interest.
4. Cooperate with federal, state, and county agencies, individuals, American Indian tribes, and non-government organizations for control of noxious weeds, pathogens, invasive species, and animal damage.
5. Create and foster partnerships with other agencies, accredited educational and research institutions, tribal colleges, and other appropriate public and private sector organizations to further research, education, protection, and interpretation.
6. Coordinate with the appropriate state and federal agencies in balancing desired wildlife and fish population objectives with desired habitat conditions.
7. Multi-party collaborative input at the geographic area or large area scale will generally precede project planning. This collaborative input will assess opportunities for travel management, elk security, and vegetation treatments, as well as other community issues. This input may be used to assist project level analysis. Exceptions may include, but are not limited to, fuels treatments or unplanned events, such as insect infestations or wildfires, where treatments are relatively inconsequential at the landscape scale.

Desired Condition of the Forest

The condition of the Bighorn National Forest will change as this forest plan is implemented. This section summarizes the desired condition of the overall Forest after 10 years and after 50 years of plan implementation. Chapters 2 and 3 of this plan contain more detailed desired condition statements for individual management areas and geographic areas on the Forest.

The Forest in the Short Term

When the Revised Plan is implemented, management actions will be directed at achieving the forestwide goals and objectives. The annual monitoring and evaluation program will be ongoing and will provide the tools to ensure that goals and objectives are being achieved.

At the end of the first decade, changes in the overall character of the landscape may be small. The Forest will appear very much as it does today.[3] Management changes to the landscape will use various tools including commercial timber harvest, and non-commercial vegetation treatments such as fuels treatment, prescribed fire, and wildland fire use. Larger changes are anticipated from natural events such as insects, diseases, wind, and wildfires.

Aspen resources will exist as small pockets, often on the fringes of conifer stands, primarily in drainage bottoms. They will be characterized by conifer succession and ungulate browsing of regeneration that will be addressed through management efforts.

Most non-forested areas will meet or be moving toward desired conditions, with structural diversity and native species composition meeting or moving toward desired conditions. Non-forested areas will be managed for a mix of seral stages (early, middle, and late) depending on direction in AMPs. Although areas that are outside the Historic Range of Variability (HRV) in regard to fire condition class may increase slightly on a forestwide basis, there will be an improvement in condition class in some areas identified as priorities in community wildfire protection plans and areas of high resource values which will make these areas less susceptible to damage due to uncharacteristically severe fires. Noxious weeds may expand, particularly in more remote areas or in areas heavily used for summer motorized recreation, though increased management emphasis will help curb expansion forestwide.

The processes and structures necessary to maintain the biological diversity of the Forest will be provided for across the landscape as a whole. Riparian and wetland areas will be meeting or moving toward desired conditions. Important habitats identified through project planning, analysis, and implementation will be managed to perpetuate habitat conditions needed for threatened, endangered, and sensitive (TES) and non-TES species. Undesirable non-native species will receive more active management to discourage their presence in favor of TES species.

[3] In comments received, the public generally wanted existing uses and appearances on the Forest maintained

Degraded aquatic habitat conditions and hydrologic and riparian function will be improved by active administration of livestock grazing and enforcement of the standards and guidelines in the AMPs. Some of the best opportunities to enhance watershed function and improve aquatic habitats include travel management planning and mitigating the impacts of road and stream interactions within a watershed. Actions that may be taken to improve watershed conditions in a given geographic area are implementation of Best Management Practices (BMPs) or upgrading existing structures to improve hydrologic function and reduce sedimentation, hydrologic connectivity, and drainage efficiency, or allow for the unimpeded movement of aquatic dependent organisms throughout the watershed.

The character and qualities of the Bighorn National Forest, which draw visitors from around the country, will be retained. Recreationists will continue to enjoy the scenery of both mountain forested and non-forested areas. A broad spectrum of recreation opportunities, from primitive to developed, will be available. Both motorized and nonmotorized winter and summer recreation opportunities will be present on the Forest. Approximately 40 miles of unneeded roads and user-created routes will be decommissioned at the end of the first decade to reduce resource damage. Some of these unneeded roads will have been converted to actively managed recreation trails.

Special Interest Areas, Research Natural Areas, wilderness, and wild and scenic rivers will provide a variety of historical, biological, and scenic values.

The Bighorn National Forest will produce a sustained flow of forest products and other commodity outputs. However, oil and gas leasing is not expected to be a major portion of these outputs. Collaborative planning efforts to develop projects and programs, which contribute to economic diversity, will be ongoing with local community interests.

Human safety and community and property protection from wildfire will be improved through coordination of community wildfire protection plans with Forest projects. Personnel from all affected agencies, governments, tribal interests, and the public will address community wildfire protection needs.

Forested Vegetation Desired Future Condition

The Desired Future Condition (DFC) of forested vegetation is a focal topic due to the predominance of forested vegetation on the forest, its importance for wildlife habitat, and its value as a commodity. Desired Future Conditions (DFCs) for forested vegetation were developed in conjunction with the forest plan revision Steering Committee. Forestwide assessments, such as the Terrestrial Ecosystem Assessment, were also used in developing this section.

In managed forested areas (suited lands), more active management is planned to provide a more even distribution of structural stages. In other areas, successional pattern and habitats will be mainly dictated by natural events, including insects, disease, and fire. Natural processes (e.g., wildfire, insects and disease, growth and senescence) will continue to be the dominant forces shaping patterns of forested vegetation regardless of management emphasis.

Approximately 25% of the forested area is classified as suited for timber production. On these acres, the general desired future structural distribution would be approximately 5-15% of forested area in early successional stages, 30-60% in mid successional stages, and 27-65% in late successional stages. Lodgepole pine and spruce-fir are the two cover types most actively managed. Lodgepole pine will generally be managed for even-aged structure, and spruce-fir will generally be managed for uneven-aged over even-aged structure.

Habitat structural stages (HSS) are used to describe the differences in size/age classes by cover type as a measure of diversity in forested lands. HSS are divided into three stages: Early (HSS 1 & 2), Intermediate (HSS 3) and Mature (HSS 4 & 5). It is important to note this is a temporal analysis; the forest will continue to change regardless of human interaction. Forested stands are typically only in the early structural stages for 20 to 30 years, so data for on-the-ground conditions will need to be updated when a site-specific project is designed. The amount and distribution of various habitat conditions will be decided during project level planning and will be determined in an interdisciplinary manner based upon the physical and biological capabilities of the landscape, by which species are present in the landscape and by the management area objective for the area.

Table 1-1. General habitat structural stage distribution, forestwide.

	Early	Intermediate	Late
General forested lands	2 to 20%	30 to 60%	50 to 75%

While these ranges are within the historic range of variation, they provided little direction for management of the Forest. To provide this direction, the numbers were refined to reflect one general number for each HSS and cover type (see following table). The figure below summarizes the current conditions[4] and the DFC for all forested lands. The DFC was based on the strategies, standards, and guidelines contained in the Revised Plan. For example, lodgepole pine historically develops from stand replacing events and thus has the largest amount of desired early HSS. Conversely, the spruce/fir cover type has the longest interval between disturbance events and larger amount of mature HSS. Limber pine would continue to experience wide-spread declines due to the white pine blister rust, thereby affecting its HSS. The abundance of intermediate structural stage and lack of early structural stage are seen in all cover types. This existing condition is largely a function of fires in the early 1900s.

[4] Current conditions were derived from the 2002 Common Vegetation Unit.

Table 1-2. Forestwide structural stage distribution by cover type.

Cover type	Early	Intermediate	Late
Existing Lodgepole pine	3%	72%	26%
Desired Lodgepole pine	7%	60%	33%
Existing Spruce-fir	1%	53%	46%
Desired Spruce-fir	5%	40%	55%
Existing Douglas-fir	0%	60%	40%
Desired Douglas-fir	5%	45%	50%
Existing Ponderosa pine	0%	56%	44%
Desired Ponderosa pine	5%	40%	55%
Existing Limber pine	1%	77%	22%
Desired Limber pine	5%	55%	40%
Existing aspen	1%	64%	35%
Desired aspen	20%	45%	35%

Figure 1-1. Forestwide structural stage distribution for spruce-fir, lodgepole pine, and Douglas-fir.

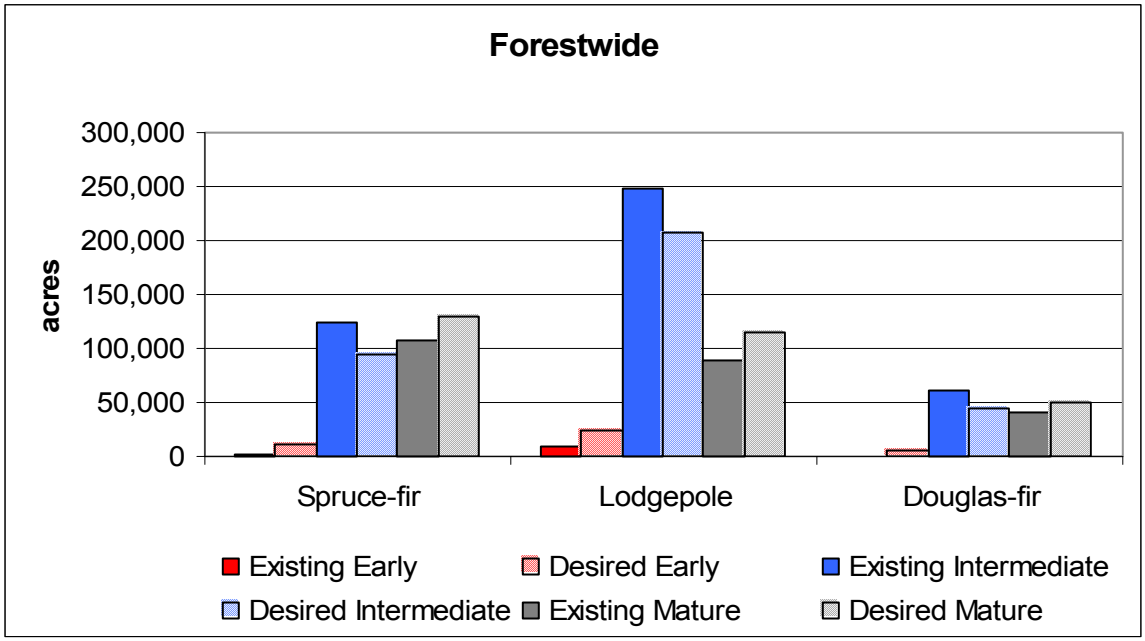
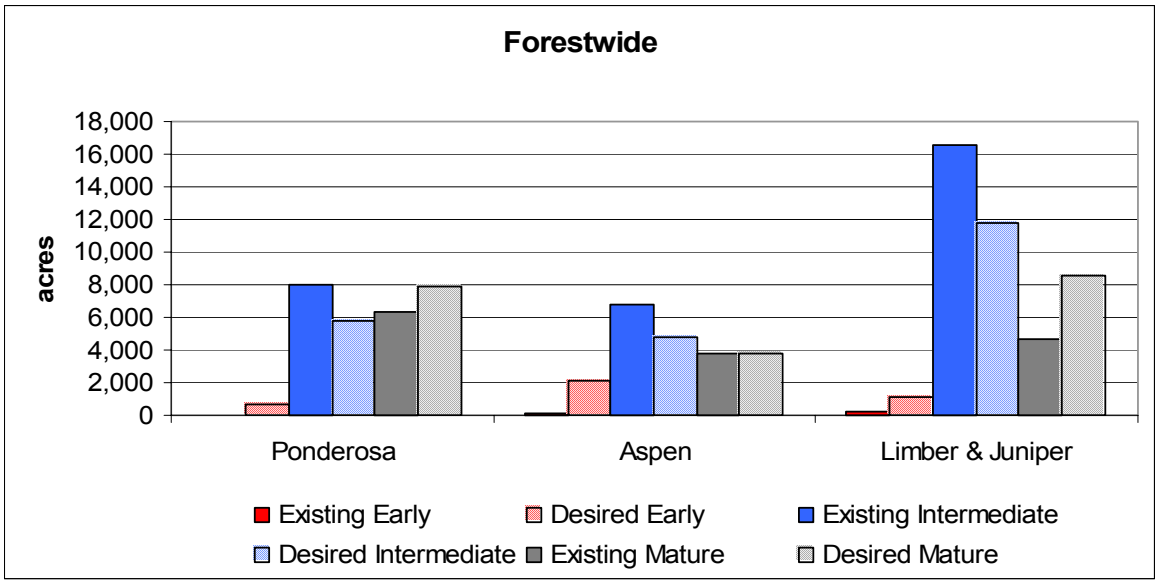


Figure 1-2. Forestwide structural stage distribution by for ponderosa pine, aspen, and limber pine and juniper. .



Lands suitable for timber production were designated through the tentatively suited analysis described in the FEIS Appendix B and management area designations. It is anticipated that there will be more active management implemented on suited lands, thus the DFC distributions consider management area direction, standards, and guidelines for those lands considered suited for timber production. The desired HSS distribution for lands suitable for timber production is shown in the table below as "Desired". The percentages reflect the typical emphasis in even vs. uneven aged management techniques used in different cover types.

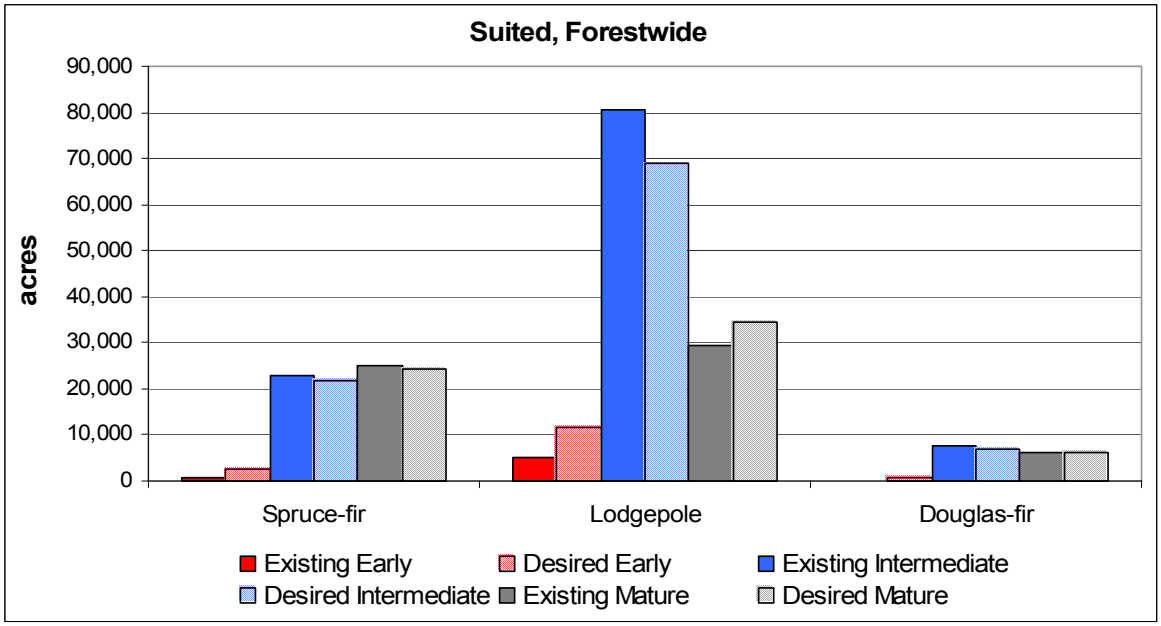
Table 1-3. Desired future condition for forestwide suited lands.

Cover type	Early	Intermediate	Late
Existing Lodgepole pine	4%	70%	25%
Desired Lodgepole pine	10%	55%	35%
Existing Spruce-fir	1%	47%	51%
Desired Spruce-fir	5%	45%	50%
Existing Douglas-fir	1%	55%	44%
Desired Douglas-fir	5%	50%	45%

It is not anticipated that the Forest will meet the desired future condition of suited timber lands in the first 50 years because the rotation ages are more than twice the 50-year period. However, it would be easier to effect percentage change in the Douglas-fir cover type

given the relatively few acres of it. The majority of the acres are in lodgepole pine, and larger acres need to be treated to affect percentage changes in that cover type.

Figure 1-3. Forestwide structural stage distribution by cover type



Management implications of DFC on suited lands. The DFC descriptions above can be used in the design of future projects. There could be an emphasis on treating the intermediate lodgepole, either by regenerating to increase the amount of early HSS, or thinning to encourage mature HSS. Uneven-aged management is typical for spruce/fir cover types, and with a 30-year cutting cycle up to one third of this cover type could eventually be entered each decade.

As a part of future site-specific analysis, the structural stage data should be updated to reflect changes. These changes will come from growth of the forest and possibly from past treatments or disturbances such as fire or wind.

The Forest in the Long Term

After five decades of plan implementation, several changes will be apparent across the landscape. Growth and natural disturbances will still be the largest factors determining structural stage distribution of forested vegetation. Modeling growth and management activities (not including natural disturbances), it is estimated that approximately 61% of the forested vegetation will be in late successional habitats, 37% in intermediate successional habitats, and 1% in early successional stages. Therefore, natural disturbances are included in the desired future structural stage conditions. The possibility of large-scale disturbance events, such as wildfire and insect and disease epidemics, will have increased with the passage of time. Due to the increased age of trees, and the increased presence of mountain pine beetle and spruce beetle, large portions of the forest could be impacted, especially if

climatic conditions favorable to insects and disease occur.

A well-distributed system of forested stands designated for management as old growth will be in place and will provide key habitat conditions needed for emphasis species. Biological diversity will continue to be maintained across the Forest for all species, with the largest concern being management of noxious weeds and other non-native species. Active aspen management will have increased the quality and quantity of aspen on the Forest.

Rangeland vegetation will include a mix of seral stages across the landscape similar to HRV. The majority of riparian areas across the Forest will be meeting desired conditions.

The physical setting and scenic beauty of the Bighorn National Forest will continue to draw visitors. Recreation opportunities ranging from primitive to developed will be available. The Forest will continue to attract visitors for a variety of recreational opportunities. There will be a well developed system of motorized and nonmotorized trails which address recreational demand as well as protection of wildlife habitat. Both motorized and nonmotorized winter and summer recreation opportunities will be present on the Forest.

A system of forest roads will be in place. The road system will meet public and resource management access needs and maintain valuable wildlife security areas. All forest system roads will be maintained to standard.

Wilderness potential will be maintained on 14% of the existing inventoried roadless areas on the Forest.

The Bighorn National Forest will produce a sustained flow of forest products and other commodity outputs. However, oil and gas leasing is not expected to be a major portion of these outputs.

Forestwide Standards and Guidelines

Introduction

The following forestwide standards and guidelines are for the protection or management of different forest resources and apply to all areas of the forest. They are used with additional standards and guidelines included with each management area prescription (found in Chapter 2 of the Revised Plan).

A **standard** is a course of action that must be followed, or a level of attainment that must be reached, to achieve forest plan goals. Deviations from standards must be analyzed and documented in a forest plan amendment.

A **guideline** is a course of action that should be followed to achieve forest plan goals, although exceptions may exist. Exceptions must be justified and documented in a project-level NEPA document; a forest plan amendment is not required.

When forestwide standards and guidelines conflict with management area standards and guidelines, those that are more stringent or restrictive are applied.

Conformance with Other Direction

This set of standards and guidelines is designed to be specific to the Bighorn National Forest. Laws, regulations, and Forest Service directives generally are not repeated in this package, although references to particular laws or directives are included to provide needed emphasis for the protection and management of specific resources.

The absence of a particular resource from this chapter does not mean that the resource is not managed, nor does it indicate that the Forest Service considers a particular resource less important than those listed. The entire forest plan, including the appendices, must be read carefully to understand how all resources will be managed. Refer to the forestwide desired condition and goal statements and forestwide objectives (described previously) and to the appendices for complete information.

Physical

Air

Standard 1. Meet state and federal air quality standards, and comply with local, state, and federal air quality regulations and requirements, either through original project design or through mitigation.

Guideline 1. Minimize the effects and impact of smoke for each fire management activity on identified smoke-sensitive areas (see Glossary), using "best available control measures" (see Glossary), monitoring smoke impacts, and following smoke management requirements established by Wyoming Department of Environmental Quality.

Geology – Caves

Standard 1. Design management activities in the vicinity of caves and karst features to protect them or to mitigate effects to them. Enforce the following practices:

a. Avoid ground disturbance within 100 feet, or greater, of an opening of a natural cave, depending on site conditions. Allow public use of known caves unless restrictions are necessary to protect non-renewable features or threatened resources present in significant caves, or to protect public safety. Proactively gate or take other measures to control and manage human access where unacceptable damage to known cave resources is occurring or has the potential to occur. Seasonal restrictions to protect bat roosting should apply from September 15th through May 15th for bats using the cave as a hibernacula roost and from April 1st to October 1st if bats are using the cave for maternity roosts. Assess potential gating needs during development of a resource management plan for caves, and ensure gates allow free passage of air, water, bats, and other animals.

b. Manage surface drainage and vegetation in the vicinity of caves or cave resources to protect the cave's microenvironment.

c. Do not sign known cave entrances and/or locations. Don't include cave entrances and/or locations in information available to the public, except Tongue River Cave, unless otherwise specified in resource management plans for caves.

Mineral and Energy Resources, General

Standards

1. Review operating plans annually. Review reclamation plans and bonds at least every three years for adequacy and to account for inflation.
2. Provide reasonable access to owners of private mineral estates under federal surface for outstanding or reserved mineral right development, as described in the ownership deed. Reasonable access and the use of the surface are authorized through an approved Plan of Operations. (Reference FSM 2830.5, 2323.75)
3. Provide for reclamation of disturbed lands to achieve the planned uses of the management area, when those lands are no longer needed for mining operations. Plans for reclamation will be submitted by the operator as a part of the operating plan. This plan shall contain proposed reclamation objectives as identified in the NEPA decision documents and practices to maintain water quality and soil stability during mining and exploration activities, including post mining and exploration, and any temporary shutdowns. Interim reclamation will be considered satisfactory when the disturbed area has been reclaimed in accordance with operating plan requirements, and desired vegetative conditions have been achieved as established in the NEPA decision documents. (Reference FSM 2802, 2803, 2840, 2817, 2820, and FSH 2809.13, 2809.11)

Guidelines

1. Restrict capital investments on lands with nonfederal mineral estate ownership in areas of moderate to high mineral development potential if the purpose of capital investment would conflict with mineral development.
2. Perform site-specific mineral evaluations prior to making substantial capital investments, such as recreation developments, on federal mineral estate in areas of moderate to high potential for valuable mineral deposits. Depending on conclusions from mineral evaluation and potential for mineral development, consider alternate location for capital investment, withdrawal of locatable minerals, restrictions on surface occupancy for leasable minerals, and/or decision not to issue mineral material sales or disposal.
3. Inspect mineral operations annually for compliance with terms and conditions of operation as outlined in approved operation plans.

4. Minimize disturbance to the riparian area by mineral activities. Utilize existing regulations and policies to minimize effects of mineral extractions in riparian areas.
5. Conduct reclamation to existing landform and vegetative characteristics as much as feasible, unless management objectives require otherwise. Initiate timely and effective rehabilitation of disturbed areas and restore riparian areas to a state of productivity comparable to that before disturbance.

Mineral and Energy Resources, Geophysical Operations

Standard
1. Prohibit geophysical operations that cause surface disturbance in administrative sites, developed recreation areas, Research Natural Areas, and on known National Register eligible heritage resource sites where there are not suitable mitigation measures.

Guidelines
1. Minimize surface disturbance from geophysical operations. Do not allow new road construction, except under justifiable circumstances. Restrict geophysical operations on key big game winter range during critical periods, depending on the type of operation and seasonal conditions.
2. Allow geophysical operations within developed recreation sites; however, manage acquisition methods, location, and timing to avoid conflicts with recreationists, and to maintain the recreational setting of the developed site.

Mineral and Energy Resources, Leasable Minerals

Standards
1. For areas that will be recommended to Congress for inclusion in the Wilderness System during this revision of the forest plan, delay leasing of minerals until authorized by Congressional action.
2. Restrict the use of production pits.

Guidelines
1. Encourage the use of closed circulation systems. Discourage the use of open reserve pits for oil and gas drilling operations. In cases where the use of pits for drilling operations is justified, analyze and monitor construction and use for minimal potential for leakage and structural failure (including pit solidification).
2. Do not charge additional fees or require additional permits for off-lease activities necessary to mitigate Forest Service issues when such activities are directly related to administration of a drilling permit.

3. Do not allow field offices unless the operator can show they are essential to production operations. When the operator can demonstrate a need for such facilities, limit the size and design to serve only those purposes for which they are necessary.
4. Discourage the stacking and storing of equipment not being used for 6 months or longer.
5. Reduce the impacts to air quality and loss of energy resources by only allowing flaring of oil and gas wells during production testing of wells. Require connection to a pipeline or re-injection well once production is established. Consider exceptions on a case-by-case basis.

Mineral and Energy Resources, Locatable Minerals

Standards

1. Withdraw developed recreation areas and areas where capital investments have been made from locatable mineral entry.
2. For designated wilderness, Congressionally designated Wilderness Study Areas, “wild” segments of designated Wild and Scenic Rivers, and areas recommended for wilderness designation in this revision for which Congress has not yet taken final action authorize through a Plan of Operations:
    a. For private land surface and mineral estate inholdings, provide for reasonable access of the type necessary to the purpose of proposed operations, and for restoration of disturbed federal lands to their natural condition when they are no longer needed for operations.
    b. For private mineral estates under the federal surface, provide for reasonable surface use as described in the ownership deed.
3. For other classified lands not withdrawn from operations under the general mining laws (Research Natural Areas, National Historical Sites, and “scenic" and “recreation" segments of Wild and Scenic Rivers):
    a. Check the status of classified lands, with respect to withdrawal, before an operating plan is approved.
    b. Provide for reasonable protection of the purposes for which the lands were classified.

3. cont.

c. Reclaim disturbed lands to a condition suitable for the purposes for which the lands were classified in accordance with 30 CFR 228.8 and the NEPA decision document.

d. Pursue withdrawals where appropriate.

Mineral and Energy Resources, Minerals Materials

Standard 1. For areas from which mineral materials were obtained, reclaim disturbed lands to a usable condition for other management activities. (FSM 2850) *Note: Lands where mineral material deposits will not be available are identified with the management area allocation.*

Mineral and Energy Resources, Paleontological Resources

Standards 1. Do not disclose sensitive paleontological information under the Freedom of Information Act.

2. Allow collection of paleontological vertebrate resources with authorization (permit or area designation) for educational and scientific purposes.

Guidelines 1. Protect from disturbance or mitigate from disturbances key paleontological resources (Classes 3, 4, and 5 of the Fossil Potential Classification) to conserve scientific, educational, interpretive, and legacy values.

2. Allow recreational collection of nonvertebrate fossil materials.

Mineral and Energy Resources, Reserved and Outstanding Rights

Standard 1. Negotiate surface management for private oil and gas minerals with the owner and operator to be as close as possible to the standards used for federal minerals. Prohibiting such development is not an alternative.

Soil, Water, Riparian, and Wetland

Standards

1. In the water influence zone (WIZ), allow only those actions that maintain or improve long-term stream health and riparian ecosystem condition. The WIZ is the aquatic ecosystem, the riparian ecosystem, characterized by distinct vegetation and associated valley bottom (Winters et al. 2003), wetlands, and ecosystems that remain within approximately 100 feet horizontally from both edges of all perennial and intermittent streams and from the shores of lakes and other still water bodies. It includes adjacent, unstable and highly erodible soil.
2. When planning stream channel or aquatic habitat improvement projects, use methods that emphasize natural channel design using native materials such as rocks, logs, and vegetation to accomplish project objectives.

Guidelines

1. Incorporate appropriate practices and design criteria from the Watershed Conservation Practices Handbook[5] into all project design, analysis, and decision documents.
2. Actively participate in planning by other federal, state and local agencies, where these plans could affect the beneficial uses of water on NFS lands.
3. Upon issuance of special use authorizations for new and existing water use facilities, include permit conditions at the point of diversion or storage, if needed, to minimize impacts to water-dependent resources or values. Water dependent resources include physical stream processes, aquatic biota, riparian habitats and communities, and aesthetic and recreational values.
4. Leave naturally occurring debris in stream channels unless it is a threat to life or property, has important resource value, or is otherwise covered by legal agreement.

[5] Soil and water practices and design criteria, for Region 2, are contained in Chapter 10 of the Handbook, FSH 2509.25.

Biological

Biological Diversity

Standard

1. Introduce exotic plant and invertebrate species only where it can be demonstrated that beneficial effects will result (e.g. soil stabilization or control of noxious weeds), and detrimental impacts are unlikely to accrue to existing native species or the recovery of extirpated species. Coordinate introductions with appropriate state and local agencies or governments.

Guidelines

1. Analyze aspen's spatial and structural occurrence in the landscape during project design. In landscapes with multiple aspen clones, manage aspen for a mix of structural stages.
2. Manage aspen stands for retention.
3. When aspen regeneration is considered, set priorities for treatment within seral aspen clones using the following criteria:
    a. Stands with large standing and down dead basal area (20 percent dead) that are single-storied and showing signs of animal barking or disease.
    b. Conifer stands that contain a small minority of live aspen basal area.
    c. Stands in heavy animal use areas, isolated clones, those at low elevations, or in riparian areas.
    d. Stands which are cost-efficient to treat and benefit aspen's distribution.
4. Manage for late-successional (old growth) forested resources according to the following criteria. An old-growth inventory will be kept on file at the Supervisor's Office.
    a. Within a geographic area (9 total on Forest), maintain 10% of existing forest cover types (except for spruce-fir) in old growth, and maintain 15% of the spruce-fir cover type in old growth. In half the acres, meet both the standard and quality (higher value) attributes identified in Mehl (1992).
    b. Use the Mehl (1992) definitions of old growth to identify and manage stands. Use remote sensing correlated to Mehl (1992) to designate old growth stands where field inventories have not been completed.

4., cont.

c. Emphasize retention of larger, functional blocks of old growth with minimum stand size of 100 acres. Include stands that are remote (difficult to access), on north slopes, or in riparian areas.

d. Identify recruitment areas if old growth requirements cannot be met under current conditions. Favor stands without past logging treatments, and unsuited acres.

e. Old growth may rotate on the landscape in response to disturbances (natural and management induced) and should occur in proportion to the existing slope classes occurring in the area.

f. Use mechanical or prescribed fire vegetation treatments to foster old growth conditions as appropriate by community type structure and as referenced by Mehl (1992).

5. Implement sagebrush management to increase habitat diversity and forage for wildlife and livestock. Assess needs for big game parturition, sage grouse summer habitat, and other biodiversity needs. Do not use mechanical control on slopes greater than 30%.

6. Maintain native meadow ecosystems by controlling conifer encroachment.

7. Maintain, or mitigate impacts to, important habitat types including alpine tundra; moss community in Dry Fork; bogs, fens, and springs (including Preacher Rock Bog and Willow Swamp[6] on Powder River District); talus slopes; cliffs; and rock outcrops.

8. Use genetically local (at the subsection level), native plant seed or material for revegetation efforts where technically and economically feasible. Use weed-free seed and mulch mixtures. While native perennials are becoming established, use non-persistent species such as nonnative annuals or sterile perennial to prevent soil erosion.

9. Manage to maintain or enhance riparian and watershed function, and associated species habitat values within 300' of perennial streams, wetlands, and lakes (over one acre). Management activities are allowed within this zone but are designed to maintain or enhance these resources.

[6] Refer to Appendix A of the Revised Plan for a location map of Preacher Rock Bog and Willow Swamp.

Biological Diversity guidelines, cont.

10. Develop prescriptions prior to forested vegetation treatment to identify the amount, size(s), stages, and distribution of down logs and snags to be left on-site, as well as live, green replacement trees for future snags.

    On forest sites, retain snags and coarse woody debris (where materials are available) in accordance with the average minimums specified in the following table. Retain the largest diameter snags possible. Leave 7 to 16 tons per acres (Graham et al. 1994) coarse woody debris, 3" diameter or larger at the large end, well distributed over 10 acres. The downed log specifications in the following table are part of this. This does not apply to projects where reducing coarse woody debris is the purpose (e.g., fuels reduction projects).

    During project planning, assess the project area versus treatment area size when designating snag and snag recruitment trees.

    Consider leaving islands with snags in all stages of decay and green snag recruitment trees to meet these needs. If no snags meet the minimum diameter and height requirements, use the largest snags available.

Table 1-4. Minimum requirements for snag and woody debris retention on forested sites.

	Snags			Downed Logs	
Cover Type	**Minimum Diameter** (inches)	**Retention Density** (number per 100 acres)	**Minimum Snag Height** (feet)	**Minimum Diameter and Length** (inches) and (feet)	**Minimum # Downed Logs/10 Acres**
Lodgepole pine	8"	400	25'	6", 8'	50
				to be part of 7-16 tons/acre of coarse woody debris 3" diameter or larger at the large end.	
Aspen	6"	500	15'	6", 8'	50
Douglas-fir	12"	500	30'	12", 8'	50
Ponderosa pine	12"	200	30'	12", 8'	30
Spruce-fir	12"	600	30'	12", 8'	50
				to be part of 7-16 tons/acre of coarse woody debris 3" diameter or larger at the large end.	

Fisheries

Standards

1. Design and implement recovery, restoration, and enhancement projects in drainages suitable for occupation or currently occupied by Yellowstone cutthroat trout or other native species. Priority drainages for Yellowstone cutthroat trout include Porcupine Creek, Dry Medicine Lodge Creek, and Mill Creek. Coordinate with state and federal agencies and private organizations during project design and implementation.
2. In coordination with the Wyoming Game and Fish Department, develop stocking plans for non-native fish species across the Forest to ensure conservation of threatened, endangered and sensitive native aquatic organisms.

Guidelines

1. Maintain, continue, and use baseline data and inventories of forest streams and watersheds as references to evaluate the condition of aquatic habitats and identify fisheries enhancement opportunities.
2. Use watershed function and channel geomorphology principles when planning for the protection, restoration, or enhancement of aquatic habitats.
3. During project implementation, mitigate or avoid impacts to aquatic species through the application of state BMPs and Water Conservation Practices Handbook (WCPH) direction to protect, maintain, or restore habitat conditions to provide for persistence and production of fish and aquatic habitats.
4. Where there has been a demonstrated need for native fish restoration, allow application of chemicals, such as rotenone and antimycin, in a manner consistent with the manufacturer's directions.

Rangeland Vegetation

Standards

1. Provide mitigation measures to protect NFS resources from animal damage control activities conducted by other government entities. Use mitigation measures that emphasize protection of public safety; threatened, endangered, and sensitive species; water quality; and other resource values.
2. Phase out grazing systems that allow for livestock grazing use in an individual unit during the entire vegetative growth period, except where determined to achieve or maintain the desired plant community.

3. Remove livestock from the grazing unit or allotment for the remainder of the grazing season when further utilization on key areas[7] will exceed allowable use criteria in the Forest Plan, annual operating instructions, or the allotment management plan.
4. In fire and timber harvest areas, manage livestock grazing to ensure impacts do not prevent successful regeneration of all desired vegetation.
5. Rest areas from grazing use where necessary to meet resource objectives.

Guidelines

1. Identify "desired plant communities" during the site-specific analysis necessary for the preparation of allotment management plans. Manage vegetation to allow for successional progress toward these desired plant communities, vegetative conditions, or seral stages. Where an allotment management plan does not identify a desired condition, manage vegetation to allow for successional progress toward mid to late seral ecological condition.
2. Improve degraded rangeland to the desired plant community. Where livestock is identified as the limiting factor in achieving desired conditions, adjust livestock management practices to result in a trend toward the desired condition. Where this is not successful, consider removal of livestock.
3. Rotate season of use on all grazing units so plants are not grazed at the same time of year in successive years. Prior to August 1st, grazing periods should not exceed 14 days to allow re-growth of grasses and grass-like plants and to limit utilization of woody species.
4. On wildlife winter range, consider design of grazing practices to enhance forage palatability, availability, and nutritional quality for wildlife uses.
5. During AMP revision or through vacant allotment assessment, evaluate domestic sheep trailing routes, livestock type, grazing rotation, and other considerations to minimize disease interaction with bighorn sheep.

[7] Key areas are defined in FEIS Appendix G – Glossary.

Rangeland Vegetation guidelines, cont.

6. When supported by research or experience, develop site-specific utilization standards, herbaceous vegetation residue, stream bank disturbance, and woody species utilization guidelines during rangeland project planning. Include stricter allowable use standards in allotment management plans where needed to reach the plan objectives, or if monitoring indicates that objectives are not being met by application of current standards and guidelines. [1985 Plan] In the absence of updated planning and a project decision document, apply the allowable use and riparian vegetation residue guidelines and mitigation measures listed in the following tables. These guidelines are applicable at the time the livestock leave the unit and include use by both livestock and wildlife.

Table 1-5. Maximum allowable use guidelines (percentage utilization by weight).

	Existing Rangeland Condition	
Type of Management	**Satisfactory***	**Unsatisfactory**
Growing season-long	30%	10%
Fall and Winter	45%	15%
Rotation	45%	35%
Deferred Rotation	50%	40%
Rest Rotation	50%	40%

Table 1-6. Riparian vegetation residue guidelines.[8]

	Existing Rangeland Condition	
Season of Use	**Satisfactory**	**Unsatisfactory**
Early Use Pasture Livestock leave pasture prior to 08/01	5 inches	5 inches
Summer & Fall Use Pasture Livestock leave pasture after 08/01	5 inches	7 inches

*Satisfactory is defined here as meeting or moving toward desired vegetative condition and unsatisfactory is defined as not meeting desired vegetative condition or undetermined.

[8] Vegetation residue guidelines are expressed in terms of the inches of stubble height to be left, measuring longest leaf, after livestock use.

Rangeland Vegetation guidelines, cont.

7. Utilize transitory forage that is available where demand exists and where investments in regeneration can be protected.
8. Coordinate forested vegetation management with domestic livestock grazing to avoid damage to rangeland improvements or unmitigated removal of natural barriers (from timber harvest activities).
9. In rangeland areas not part of grazing allotments (including special use pastures and areas with recreational livestock use), identify "Desired Plant Communities" in site-specific analysis for the preparation of a management plan for the area or in other project specific analysis. In these areas, manage vegetation to allow for successional progress toward these desired plant communities, vegetative conditions, or seral stages. Where a management plan or other project specific plan does not identify a desired condition, manage vegetation to allow for successional progress toward mid to late seral ecological condition. Apply guidelines in Tables 1.5 and 1.6 above where appropriate.
10. Manage livestock grazing in riparian and aspen areas using the following interrelated practices implemented as a complete package where feasible:
    a. Apply short-duration grazing, as feasible (generally less than 20 days), to provide greater opportunity for re-growth and to avoid utilization of woody species.
    b. Keep stock tanks, salt supplements, livestock handling facilities, and similar features out of the water influence zone and aspen stands.
    c. Keep stock driveways out of the water influence zone except to cross at designated points. Harden water gaps and designated stock crossings where needed and feasible.
    d. Adjust management in riparian areas and wetlands to remedy detrimental soil compaction whenever it occurs.
    e. Design grazing systems to limit utilization of woody species. Move livestock from riparian and aspen areas when livestock begin to have a preference for woody species, especially species in the young maturity classes.

10., cont.

f. Allow livestock to remove no more than 35% of terminal leaders on willows. Where riparian communities are early seral and recovery to later seral communities is identified as an objective, implement stricter standards. The total combined use of livestock and wildlife on willows and other woody riparian species should not exceed 50% of terminal current annual leaders on willows. Assess livestock and combined wildlife use at the project level.

11. During AMP revision, evaluate livestock access to allotments, and evaluate opportunities for designation of "forage reserve" allotments.

Rangeland Improvement and Maintenance

Standards

1. Allow livestock handling facilities such as corrals, loading chutes, counting gates, etc., in areas specified in the AMP or Annual Operating Instructions (AOI). Portable facilities are preferred.
2. Do not construct new permanent living quarters associated with cow or sheep camps. Existing camps may be removed or replaced. Temporary camps may be used.
3. When constructing or rebuilding fences, design them for passage by wildlife unless the purpose is to exclude wildlife.

Guidelines

1. Design and locate new or reconstructed fences to meet Scenic Integrity Objectives (SIOs) for the area.
2. Minimize construction of new fences.
3. Consider pole top, let-down, or other designs which will reduce conflicts with winter recreationists when planning fences for control of livestock.
4. Install durable and effective escape ramps for birds and small mammals in livestock water tanks.
5. Provide gates, cattle guards, or pass-throughs as needed for visitor access.
6. Design and locate new stock pipelines to be out of view from open forest system roads and trails. Bury permanent pipelines where feasible. As AMPs are revised, schedule reconstruction of existing stock pipelines not designed to this guideline.
7. In water developments constructed in aspen stands and willow communities, pipe the water to a stock-watering site outside the stand to minimize the adverse impacts to the stand.

8. Develop or reconstruct spring sites in a manner that will maintain the function of dependent riparian and wetland resources and allow continued wildlife use.

Silviculture

Standards

1. Use the scientifically defined reproduction methods shown, by Forest covertype (see following table) which meet the management objectives for the landscape or individual stands of trees within a landscape setting. Use and apply both even-aged and uneven-aged management systems at scales ranging from a few acres to many hundreds of acres. These reproduction methods are to be applied in a manner that will ensure natural regeneration where artificial regeneration is not necessary for other resource objectives. Tree stand vegetation management treatments are to be approved by certified silviculturists.

Table 1-7. Acceptable reproduction method by forest cover type.

Forest Cover Type	Even-aged	Two-aged	Uneven-aged
Ponderosa pine	Shelterwood, Clearcut, and Seed-Tree	Irregular Shelterwood	Group Selection and Single-Tree Selection
Douglas-fir	Shelterwood, Clearcut[4], and Seed-Tree	Irregular Shelterwood	Group Selection and Single-Tree Selection
Aspen	Coppice[1]	Coppice with Standards[2]	Group Selection[3]
Lodgepole pine	Shelterwood, Clearcut, and Seed-Tree	Irregular Shelterwood	Group Selection
Engelmann spruce-Subalpine-fir	Shelterwood and Clearcut[4]	Irregular Shelterwood	Group Selection and Single-Tree Selection

[1] Coppice is a vegetation reproduction method with clear felling or clear cutting. Clear felling (clear cutting) stimulates sprouting from the residual roots.

[2] "Standards" are selected overstory trees reserved for a longer rotation at the time each crop of coppice material is cut.

[3] Use of group selection as an acceptable silviculture system in aspen is currently under study to determine regeneration success, but is authorized on a test basis.

[4] Clear cutting is acceptable but not a standard practice in spruce/fir and Douglas-fir.

Silviculture standards, cont.

2. When trees are harvested to meet timber production objectives, make the cut in such a way that there is assurance that the technology and knowledge exists to adequately restock these areas within five years after final harvest. Minimum restocking levels are defined in following table.
3. No minimum seedling height requirements are specified. Seedlings must have survived a minimum of one year and be expected (on the basis of research and experience) to be able to produce the desired future stand condition specified for this area in the forest plan. The numbers of seedlings in the following table represent the minimum number of seedlings required, considering natural mortality, to produce a merchantable timber stand at rotation age without intermediate treatments.

Table 1-8. Standard for the required minimum numbers of seedlings for adequate restocking of a regeneration site.

Species	Spruce/fir	Aspen	Lodgepole pine	Ponderosa pine	Other softwood	Other hardwood
Trees/acre	150	300	150	150	150	300

4. The maximum size of openings created by even-age management will be 40 acres, regardless of forest type, with the following exceptions:
    a. Where the Regional Forester approves proposals for larger openings after a 60-day public review.
    b. Where larger openings are the result of natural catastrophic conditions of fire, insect or disease attack, or windstorm.
    c. Where the area that is cut does not meet the definition of created openings.
5. Limit timber harvest activities for timber production objectives to those lands classified "suitable."

Guidelines

1. Avoid altering more than 1/3 of the edge of a natural opening whenever an artificially created opening lies adjacent to a natural opening. Do not create additional edge until previously treated areas are no longer considered an opening according to Table 1-9.

Silviculture guidelines, cont.

2. In Management Areas 4.2, 4.3, 5.11, 5.12, 5.13, 5.5, and 8.22, retain burned, blow-down or insect/diseased areas for wildlife by managing salvage harvest according to the following:
    a. In areas greater than 250 acres, retain 10% of the area in an unsalvaged condition.
3. In Management Areas other than 4.2, 4.3, 5.11, 5.12, 5.13, 5.5, and 8.22, retain burned, blow-down or insect/diseased areas for wildlife by managing salvage harvest according to the following:
    a. In areas greater than 250 acres, retain 20% of the area in an unsalvaged condition.
4. Do not consider artificially created openings as openings when the trees in the openings have reached a height and density that meets the objectives established for the management area (Table 1-9). These objectives and criteria may be validated or modified based upon local conditions encountered during implementation.

Table 1-9. Bighorn National Forest guidelines for when an opening is no longer considered an opening.

Objective	Trees per Acre	Height of Trees
Ponderosa pine and mixed conifers		
Big Game Cover and Low Scenic Integrity Objective	300	7 feet
High Scenic Integrity Objectives	150	50% of the height of the adjacent stand
Moderate Scenic Integrity Objectives	200	25% of the height of the adjacent stand
Lodgepole pine and spruce/fir		
Big Game Cover and Low Scenic Integrity Objective	300	7 feet
High Scenic Integrity Objectives	150	50% of the height of the adjacent stand
Moderate Scenic Integrity Objectives	150	25% of the height of the adjacent stand
Aspen		
Big game Cover and all Scenic Integrity Objectives	500	7 feet

Silviculture guidelines, cont.

5. Do not undertake regeneration harvests of even-aged timber stands (sites) until the stands have generally reached or surpassed 95 percent of the culmination of the mean annual increment measured in cubic feet. Exceptions may be made where resource management objectives or special resource considerations require earlier harvest, such as:
    a. Stands that are in imminent danger from insect or disease attack.
    b. Wildlife habitat improvement.
    c. Scenery resource enhancement or rehabilitation.
    d. Ecosystem restoration.
    e. Areas managed for Christmas tree production.
    f. Overstocked/stagnant lodgepole stands.
6. For suited lands, consider rotation ages and cutting cycles listed in Table 1-10.
7. Manage vegetation around high value areas (e.g., campgrounds, summer homes, lodges and other developed facilities) to reduce the fuel hazard. This reduction is characterized by lower stand densities, fewer standing dead trees, less woody debris and fewer understory trees and shrubs.

Table 1-10. Rotation ages for suited lands.

Covertype	Rotation Age	Uneven-aged Cutting Cycle
Lodgepole pine	90-140	20-30
Spruce/fir, Douglas-fir	100-180	20-30
Aspen	80-120	N/A

Special Forest Products

Standard 1. Allow plant collecting for the following purposes (this does not apply to the harvest of trees for timber or products other than logs):

a. Scientific or educational - Permits may be issued to collect sensitive plants or plant parts for scientific or educational purposes but not for commercial or personal use. Such collection must not jeopardize the continued vigor or existence of a plant population. Collecting of plants or plant parts in Management Areas 1.11 though 2.2 shall not be allowed except by permit issued for scientific or educational purposes.

b. Commercial - Collecting of plants or plant parts for any commercial purpose requires a permit (including personal use transplants). When evaluating applications for commercial collecting permits, consideration should be given to the impacts on all resources, including biological diversity.

c. General botanical collections - Botanical collection permits may be issued to authorize collection of species other than endangered, threatened, or sensitive.

Timber Utilization

Standard 1. Utilization standards for live and dead trees are shown in the following table. .

Table 1-11. Timber utilization standards.

Type of Product	Minimum Diameter at Breast Height (inches)	Top Diameter (inches)	Minimum Length (Feet)	Net Scale in % of Gross Scale
		Live Trees		
Coniferous Sawtimber	7	6	8	33 1/3
Products Other Than Sawtimber	5	4	6.5	Variable
		Dead Trees		
Sawtimber	8	7	16	33 1/3
Products Other Than Sawtimber	5	4	6.5	Variable

Threatened, Endangered, and Sensitive (TES) Species

Standards

1. Bald eagle
    a. If a winter roost or nest site is discovered, ensure that the necessary habitat components are maintained.
    b. Prohibit human activities within 1 mile of bald eagle winter roosting areas between November 1 and March 15. Restrict human activities within one mile of an active nest site between February 15 and August 15 unless site-specific data suggests otherwise.
2. Restrict activities to avoid disturbing threatened, endangered, and proposed species during courtship, breeding, young rearing, or at other times critical to survival. Exceptions may occur when individuals are adapted to human activity, or the activities are not considered a threat. Document exceptions in coordination with the U.S. Fish and Wildlife Service and Wyoming Game and Fish Department.
3. Avoid actions that would result in a trend toward federal listing or loss of population viability of sensitive species. The protection will vary depending on the species, potential for disturbance, topography, location of important habitat components and other pertinent factors. Give special attention during breeding, young rearing, and other times that are critical to survival of both flora and fauna.

If the Bighorn NF is determined to be occupied habitat per the 2005 Lynx Conservation Agreement, management direction from the Revised Plan will be implemented for the remainder of the planning period on lynx habitat within Lynx Analysis Units on National Forest lands. Revised Plan direction will (1) implement the conservation measures of the Lynx Conservation Assessment and Strategy (equivalent of Alternative B of the Northern Rockies amendment DEIS proposed action) until the Northern Rockies Lynx Amendment process is complete, (2) incorporate the final Northern Rockies amendment alternative through plan amendment as appropriate, and (3) validate lynx management direction through plan amendment, as necessary, once critical habitat is designated and/or a Recovery Plan is developed by the U.S. Fish and Wildlife Service that may or may not include the Forest as necessary habitat

The following apply to Canada lynx habitat in the Lynx Analysis Units (LAUs) and linkage areas, subject to valid, existing rights. They do not apply to wildfire suppression, or to wildland fire use.[9]

Lynx – All management practices and activities

Objective
1. Maintain or restore lynx habitat connectivity in and between LAUs, and in linkage areas.

Standards
1. New or expanded permanent developments and vegetation management projects must maintain habitat connectivity.
2. LAU boundaries will not be adjusted except through agreement with the USFWS, based on new information about lynx habitat.

Guideline
1. Methods to avoid or reduce effects on lynx should be used when constructing or reconstructing highways or forest highways across federal land. Methods could include fencing, underpasses, or overpasses.

Lynx – LAU boundaries

Standard
1. LAU boundaries will not be adjusted except through agreement with the FWS, based on new information about lynx habitat.

Lynx – Vegetative management activities and practices (does not apply to wildfire suppression, wildland fire use, removal of vegetation for permanent developments like mineral operations, ski runs, roads, etc.)

Objectives
1. Manage vegetation to be more similar to historic succession and disturbance processes while maintaining habitat components necessary for the conservation of lynx.
2. Maintain or improve lynx habitat, emphasizing high-quality winter snowshoe hare habitat near denning habitat.
3. Conduct fire use activities to restore ecological processes and maintain or improve lynx habitat.
4. Design regeneration harvest, reforestation, and thinning to develop characteristics suitable for winter snowshoe hare habitat.

Standards
1. Unless a broad scale assessment has been completed that substantiates different historic levels of unsuitable habitat, limit disturbance in each LAU follows:
    a. If more than 30 percent of the lynx habitat in an LAU is currently in unsuitable condition, no additional habitat may be made unsuitable by vegetation management projects.

[9] Direction from the Northern Rockies Lynx Amendment Alternative B (January 2004)

2. Timber management projects shall not change more than 15 percent of the lynx habitat on NFS or BLM lands in an LAU to an unsuitable condition in a ten-year period.
3. Maintain at least ten percent of the lynx habitat in an LAU as denning habitat in patches generally larger than five acres. Where less than ten percent denning habitat is present in an LAU, defer vegetation management projects in stands that have the highest potential to develop denning habitat.
    a. Defer vegetation management projects in stands that have the highest potential to develop denning habitat.
4. After a disturbance kills trees in areas five acres or smaller that could contribute to lynx denning habitat, salvage harvest may occur only in:
    a. Developed recreation sites, administrative sites, or authorized special use structures or improvements.
    b. Designated road or trail corridors where public safety or access has been or may be compromised.
    c. LAUs where denning habitat has been mapped and field-validated, provided at least ten percent is retained and well distributed.
5. Precommercial thinning projects that reduce winter snowshoe hare habitat during the stand initiation structural stage may occur only within 200 feet of administrative sites, dwellings, or outbuildings. NOTE: Some thinning projects, such as white pine pruning or Christmas tree harvest, may occur if winter snowshoe hare habitat is not reduced.
6. Precommercial thinning projects that reduce winter snowshoe hare habitat during the understory-reinitiation or old-multistory structural stages may occur only within 200 feet of administrative sites, dwellings or outbuildings.

Guidelines

1. Vegetation management projects should be planned to recruit a high density of conifers, hardwoods, and shrubs where such habitat is scarce or not available.

   Winter snowshoe hare habitat should be near denning habitat.

   Vegetation management projects should be planned to extend the production of winter snowshoe hare habitat when forage quality and quantity is declining.

2. Where more denning habitat is desired, leave standing trees and coarse woody debris in amounts similar to what would be there naturally.

   Denning habitat should be near winter snowshoe hare habitat.

3. Vegetation management projects designed to retain or restore denning habitat should be located where there is a low probability of stand-replacing fire.

4. Fire use activities should not create permanent travel routes that facilitate snow compaction.

   Constructing permanent firebreaks on ridges or saddles should be avoided.

5. Habitat for alternate prey species, primarily red squirrel, should be provided in each LAU.

Lynx – Livestock management

Objective

1. Manage livestock grazing to be compatible with improving or maintaining lynx habitat.

Standards

1. In fire- and harvest-created openings, managed livestock grazing to make sure impacts do not prevent shrubs and trees from regenerating.

2. In aspen stands, manage livestock grazing to contribute to their long-term health and sustainability.

3. In riparian areas and willow carrs, manage livestock grazing to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.

4. In shrub-steppe habitats, manage livestock grazing, in the elevation ranges of forested lynx habitat in LAUs, to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.

Lynx – Human use projects (e.g., special uses other than grazing, recreation management, roads, highways, mineral and energy development). Does not apply to vegetation management projects or grazing projects directly.

Objectives

1. Maintain the lynx's natural competitive advantage over other predators in deep snow by discouraging the expansion of snow-compacting activities in lynx habitat.

2. Manage recreational activities to maintain lynx habitat and connectivity.

3. Concentrate activities in existing developed areas rather than developing new areas in lynx habitat.
4. Provide for lynx habitat needs and connectivity when developing new, or expanding existing, developed recreation sites or ski areas.
5. Manage human activities – such as exploring and developing minerals and oil and gas, placing utility corridors and permitting special uses – to reduce impacts on lynx and lynx habitat.
6. Reduce adverse highway effects on lynx by working cooperatively with other agencies to provide for lynx movement and habitat connectivity and to reduce the potential of lynx mortality.

Standards

1. Allow no net increase in designated over-the-snow routes or play areas by LAU, unless designation serves to consolidate use and improve lynx habitat.

   This does not apply inside permitted ski area boundaries, to winter logging, to rerouting trails for public safety, to accessing private inholdings or where regulated by Human Use Standard 3.
2. When developing or expanding ski areas, locate trails, access roads and lift termini to maintain and provide lynx diurnal security habitat if it's been identified as a need.
3. Winter access for non-recreation special uses and mineral and energy exploration and development, shall be limited to designated routes or designated over-the-snow routes.

Guidelines

1. When developing or expanding ski areas, provisions should be made for adequately sized inter-trail islands that include coarse woody debris, so winter snowshoe hare habitat is maintained.
2. When developing or expanding ski areas, nocturnal foraging should be provided consistent with the ski area's operational needs, especially where lynx habitat occurs as narrow bands of coniferous forest across mountain slopes.
3. Recreation developments and operations should be planned in ways that both provide for lynx movement and maintain the effectiveness of lynx habitat.
4. For mineral and energy development sites and facilities, remote monitoring should be encouraged to reduce snow compaction.
5. For mineral and energy development sites and facilities that are closed, a reclamation plan that restores lynx habitat should be developed.

6. Upgrading unpaved roads to maintenance levels 4 and 5 should be avoided in lynx habitat, if the result would be increased traffic speeds and volumes, or a foreseeable contribution to increases in human activity or development.
7. New permanent roads should not be built on ridge-tops and saddles, or in areas identified as important for lynx habitat connectivity.

   New permanent roads and trails should be situated away from forested stringers.
8. Cutting brush along low-speed, low-traffic-volume roads should be done to the minimum level necessary to provide for public safety.
9. On new roads built for projects, public motorized use should be restricted. Effective closures should be provided in road designs. When the project is over, these roads should be reclaimed or decommissioned, if not needed for other management objectives.

Lynx – Linkage areas

Objective
1. In areas of intermingled land ownership, work with landowners to pursue conservation easements, habitat conservation plans, land exchanges or other solutions to reduce the potential of adverse impacts on lynx and lynx habitat.

Standards
1. When highway or forest highway construction or reconstruction is proposed in linkage areas, identify potential highway crossings.
2. Manage livestock grazing in shrub- steppe habitats to contribute to maintaining or achieving a preponderance of mid- or late-seral stages, similar to conditions that would have occurred under historic disturbance regimes.

Guideline
1. NFS and BLM lands should be retained in public ownership.

Wildlife

Guidelines

1. Protect known raptor nest sites. Use spatial and temporal restrictions as necessary based on species-specific requirements for timing, intensity, and duration of proposed management activity, activity type, and surrounding vegetative and topographical elements. Use *Guidelines for Raptor Protection* (USFWS 2002) to establish spatial and temporal buffers for active nests. Forest vegetative manipulation within known nesting territories should be designed to maintain or improve desired nesting and foraging habitat. Consult goshawk management recommendations (Reynolds 1992) when designing or implementing projects in habitat for northern goshawk.[10]
2. Apply seasonal restrictions on motorized travel routes to reduce disturbance in key big game areas such as birthing areas and winter ranges.[11] Refer to Appendix A for maps of these areas, as identified by the Wyoming Game and Fish Department.
3. Where known nests of avian sensitive species or species of concern occur, avoid nest disturbance from courtship through fledging.
4. When evaluating abandoned mines for closure or other management actions, gates shall be used to protect habitat for bats if public safety and other resource needs can be met.
5. In primary potential bighorn sheep habitat, utilize vegetation management options to enhance habitat by improving forage quality and reducing potential migration barriers (conifer encroachment). Provide interpretive opportunities in viewing areas if and where appropriate. Refer to the administrative record for location of primary bighorn sheep potential habitat.
6. Maintain current amounts (no net decrease) of elk security areas at the Forestwide level for planned management actions. Coordinate with the Wyoming Game and Fish Department in project level analysis of effects, project design, and identification of improvement areas. Refer to Appendix A of the Revised Plan for the definition of security areas and implementation considerations.

[10] The goshawk management recommendations, (Reynolds 1992), Wyoming Sage Grouse Conservation Plan, Partners In Flight Bird Conservation Plan are for conservation purposes only. The guidance does not contain standards and does not supercede forestwide or management area standards and guidelines.

[11] These areas will be delineated on the Travel Map, to be developed after the Record of Decision (for this revision effort) is signed.

7. Design and build structures such as fences, roads, and canals, so they do not create unnecessary or unreasonable barriers, disruptions, or hazards to wildlife, and to minimize habitat fragmentation.

8. Protect habitat integrity and minimize effects to wildlife when developing "Watchable Wildlife" opportunities.

9. When considering vegetation management activities, maintain two to six turkey-roost sites per section in ponderosa pine communities occupied by turkeys. Sites should contain mature trees with an average diameter (dbh) of 10-14 inches, widely spaced horizontal branches, and basal areas at least 90 square feet per acre. Sites should be at least one-quarter acre in size. Provide sites on the upper third of east facing slopes if available. In areas dominated by ponderosa pine that provide habitat for turkeys, consider published management guidelines (e.g., Hoffman 1993) for turkeys when planning vegetation management projects.

10. Avoid the use of highly toxic organophosphate and carbamate insecticides in sage grouse summer use habitats. Consult published management guidelines (e.g., Connelly et al. 2001, Wyoming Sage Grouse Conservation Plan) when considering management activities in potential sage grouse summer habitat.

11. Consult state and regional Partners In Flight (PIF) Bird Conservation Plans for additional guidance on habitat management for land birds that occur on the Forest, and consider PIF guidelines in design of proposed management actions.

12. Conduct habitat monitoring and implement corrective actions in areas where combined livestock and wildlife grazing are exceeding forage utilization standards in conjunction with Wyoming Game and Fish and livestock permittees.

13. Control undesirable non-native wildlife species in conjunction with the Wyoming Game and Fish Department and other public and private cooperators. Desirable non-native species include moose, gray partridge, chukar, and turkeys.

14. When designing communication sites, reduce potential for avian mortality by minimizing the need for lighted structures.

Disturbance Processes

Fire

Guidelines 1. Apply an appropriate management response[12] (suppression or fire use) to all ignitions, according to the Forest Fire Management Plan and the Appropriate Management Response (AMR) map in Appendix A of the Revised Plan. Refer to the following table for tactical options and prescribed fire direction.

Table 1-12. Fire management direction for the Bighorn National Forest.

	Unplanned Ignitions Wildland Fire Must be managed as unwanted wildland fires if human-caused, if approved fire use plan does not exist, or when fire presents unacceptable threat to human safety or values to be protected.		**Planned ignitions** May be implemented by mgmt action authorized by approved plans
	Tactical Options		
Management Area	**Mechanized Equipment[13]**	**Aerial Retardant Application[14]**	**Prescribed fire**
1.11, 1.13	X[15]	X	
1.2	X[13]	X	X
1.31	X[16]	X	X
1.32, 1.33	XL	X	X
1.5	X[17]	X	X
2.1, 3.1	X[18]	X	X
2.2	X[16]	X	X
3.24	XL[19]	XL[19]	X

[12] Appropriate Management Response – The response to a wildland fire is based on an evaluation of risks to firefighter and public safety, the circumstances under which the fire occurs, including weather and fuel conditions, natural and cultural resource management objectives, protection priorities and the values to be protected. (Review and Update of the 1995 Federal Wildland Fire Management Policy, January 2001)

[13] ME = Mechanized equipment.

[14] AR = Aerial retardant application.

[15] Dozers are prohibited except with Regional Forester approval. Use of helicopters, motorized equipment, and mechanical transport is prohibited except with Forest Supervisor approval.

[16] Dozers are prohibited except with Forest Supervisor approval. Chainsaws, engines, ATVs and pumps are allowed without Forest Supervisor approval.

[17] Dozers and motorized vehicles are prohibited except with Forest Supervisor approval. Chainsaws and pumps are allowed without Forest Supervisor approval.

[18] Subject to consultation with appropriate parties and/or Historic Preservation Plan (HPP).

Management Area	Unplanned Ignitions Wildland Fire Must be managed as unwanted wildland fires if human-caused, if approved fire use plan does not exist, or when fire presents unacceptable threat to human safety or values to be protected.		Planned ignitions May be implemented by mgmt action authorized by approved plans
	Tactical Options		
	Mechanized Equipment[13]	Aerial Retardant Application[14]	Prescribed fire
3.31	X	X	X
3.4	X[14]	X	X
3.5	X	X	X
4.2	X	X	X
4.3	X	X	X
4.4	X[20]	X	X
5.11, 5.12, 5.13, 5.21, 5.4, 5.5	X	X	X
5.41	X	X	X
8.1, 8.22	X	X	X

X – allowed
XL – allowed with line officer approval for specific incident.

2. In areas where wildland fire use is the AMR, as designated on the on the AMR map, use natural ignitions to accomplish resource management objectives.
3. Reduce the threat of wildfire to public and private developments by following guidelines in the National Fire Protection Association Publication 1144, *Standards for Protection of Life and Property from Wildfire*.
4. Reduce activity fuels resulting from all projects/activities to acceptable levels in a cost effective manner.
5. Avoid aerial application of retardant in wetlands and riparian areas unless necessitated by human safety or property loss considerations.

[19] Aerial retardant and mechanized equipment, except for chainsaws and pumps, excluded from the 200 ft zone riparian zone unless line officer approved.

[20] Mechanized equipment prohibits dozers and prohibits motorized vehicles except on existing roads, but allows for chainsaws and pumps.

Insects and Disease

Guidelines

1. Use integrated pest management techniques, including silviculture treatments, to meet management area objectives. Base treatment activities on values of, and risks to, wildlife and rare plant habitat and adjacent private lands, as well as public land. Give priority to areas in which values to be protected exceed the cost of protection; for example, areas adjacent to subdivisions, metropolitan areas, recreation sites, or areas of concentrated public use.
2. Consider existing and potential infestation sources in the proximity of the area to be protected where insect and disease disturbances are to be restricted.
3. Apply eradication or suppression methods for gypsy moth, when needed, as determined by surveys, and in accordance with the integrated pest management approach (USDA Forest Service, Animal and Plant Health Inspection Service FEIS. 1996. *Gypsy Moth Management in the U.S.*).

Non-native and Invasive Species

Standards

1. Determine the risk of noxious weed introduction or spread and implement appropriate mitigation measures for all proposed projects or activities. Use the *USFS Guide to Weed Prevention Practices* (2001).
2. Use only certified "noxious weed free" hay or straw for feed.
3. Use only certified "noxious weed free" seed, mulch, and straw for revegetation and erosion control projects.
4. Manage invasive plant species using integrated management techniques, including mechanical, chemical, prescribed fire, and biological control methods.
5. Include provisions that are necessary to prevent the spread of noxious weeds in contracts and permits for use of NFS lands and resources.

Guidelines

1. Develop an invasive species management program to include noxious weeds and pest management that addresses the following components: awareness, prevention, inventory, planning, treatment, monitoring, reporting, and management objectives.
2. Set priorities for managing invasive plants including noxious weeds based on the following:
    a. Prevent the introduction of new invaders
    b. Conduct early treatment of new infestations
    c. Contain and control established infestations.
3. Give consideration to the following when setting priorities for the treatment of invasive plants including noxious weeds:
    a. Overall threat of the species including rate of spread and difficulty of treatment
    b. Invasions found within special management areas, for example Research Natural Areas, Wildernesses, and other areas of concern
    c. Probability that the treatment strategy will be successful
    d. Refer to state of Wyoming BMPs.
4. To reduce transport or establishment of noxious weed seeds, wash all equipment used in ground-disturbing or fire suppression operations (except for initial attack) prior to arrival on the forest.
5. Conduct archeological review of pesticide or herbicide spraying within ¼ mile of petroglyph or pictograph properties.

Social

Heritage Resources

Standard

1. Leave human remains undisturbed unless there is an urgent reason for their disinterment. In case of accidental disturbance of historic graves or re-internment, follow appropriate state or tribal policies.

Guidelines

1. Consult with tribal governments during design of projects with potential to affect cultural values and practices to help ensure protection, preservation, and use of areas that are culturally important to them.
2. Protect heritage resources from damage or vandalism through project design, specified protection measures, monitoring, and coordination.
3. Enhance and interpret significant heritage sites for the education and enjoyment of the public when such development will not degrade the heritage property or conflict with other resource considerations.
4. Protect, find an adaptive use for, or interpret cultural resources on NFS lands that are listed on the National Register of Historic Places (NRHP), the National Register of Historic Landmarks, or have been determined to be eligible for the National Registers.
5. To ensure proper resource protection and to ensure that proper procedures are conducted, refer to the map of Historic Districts in Appendix A of the Revised Plan during site-specific project planning (36 CFR 800).
6. Nominate or recommend cultural resource sites to the NRHP in the following priority:
    a. Sites representing multiple themes.
    b. Sites representing themes which are not currently on the National Register within the state.
    c. Sites representing themes currently represented by single sites.

Recreation – General

Standards

1. Allow wheelchair use in nonmotorized areas as long as the wheelchair meets the legal definition of wheelchair, "a device designed solely for use by a mobility impaired person for locomotion, that is suitable for use in an indoor pedestrian area." (Title V Sections 507c(2) of the American with Disabilities Act)
2. At all new or reconstructed recreation facilities and sites, provide a range of universally accessible opportunities within the limits of the site characteristics and Recreation Opportunity Spectrum (ROS) classification.

Guidelines

1. Cooperate with state, tribal, and local governments; holders of water rights; and other interested parties to maintain enough additional water in associated streams to sustain the water-dependent recreational values. (Generally, Water Conservation Practices Handbook 12.5 [standard 2 of soil, water, riparian and wetland, bullet 7] provides for most recreation-related water uses, but additional water may be needed for special recreational features and heavy use recreational areas.)
2. Use Tread Lightly!®, Leave No Trace, and other Forest Service approved environmental education techniques in education and interpretation.
3. Manage vegetation in high-use recreation areas, including hazard trees, to provide for public safety and to improve forest health, as needed to maintain or improve the desired recreation setting(s).
4. Allow mountain bikes forestwide unless otherwise prohibited, or because of user conflicts or resource damage.
5. Manage and regulate recreation pack and saddle stock to avoid resource damage and to avoid conflicts with permitted livestock regarding forage use levels or management for a desired condition.
6. Use bear-resistant garbage containers and food storage practices in areas where human/bear interaction problems occur. Convert existing trash facilities at lodges, resorts, and campgrounds through replacement. Provide signing or other educational opportunities for the public, outfitters, and guides.
7. Manage recreation use to stay within the capacity allowed for the prescribed Recreation Opportunity Spectrum (ROS) objective shown in the following table.

Table 1-13. Social setting criteria.

Primitive	Semi-Primitive Nonmotorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Usually less than 6 parties per day encountered on trails and less than 3 parties visible at campsite	Usually 6-15 parties per day encountered on trails and 6 or less visible at campsites	Usually 10-20 parties per day encountered on trails and 8 or less visible at campsites	Frequency of contact is moderate to high on roads, low to moderate on trails and away from roads	Frequency of contact is moderate to high in developed sites, on roads and trails, and on water surfaces, moderate away from developed sites.	Large numbers of users onsite and in nearby areas.

Recreation – Special Uses

Standard
1. Do not authorize additional resorts or lodges on the forest until expansion at existing resorts is complete.

Guidelines
1. Continue recreation residence use unless environmental analysis shows a higher need for these lands. Work in partnership with permit holders.
2. For appraisal purposes, combine isolated cabin sites into summer home groups where access and other attributes have similar value characteristics.

Recreation – Developed

Standard
1. Design, construct, and manage developed recreation sites according to the adopted Recreation Opportunity Spectrum (ROS) class, the SIO(s), and Recreation Facility Master Plan, and the Built Environment Image Guide (BEIG).

Guidelines
1. Provide parking, trailhead panels for trail information and interpretation, and appropriate sanitation facilities at trailheads as needed.
2. Design developed sites adjacent to a wilderness to complement wilderness management objectives.

3. When planning and operating recreation facilities, consider the following:
    a. Use and demand, including hunting and off seasons
    b. Budget constraints
    c. Consistent dates of operations
    d. Weather, site, and road conditions
    e. Popularity
    f. Impacts to dispersed sites
    g. Fire danger
    h. Adjacent available facilities and use areas
    i. Concessionaire's needs
    j. The role of volunteers
    k. Resource impacts
    l. Access points or areas served
    m. Deferred maintenance
4. When closing or offering less than full service in recreation facilities, consider the following "Meaningful Measures" standards:
    a. Health and cleanliness
    b. Safety and security
    c. Condition of facilities and equipment
    d. Administration needs
    e. Visitor expectations, needs and preferences
    f. Recreation setting and consistency with objectives
5. Where conflicts exist, construct fences around recreation facilities to exclude livestock.

Recreation - Dispersed

Standards

1. Prohibit, or mitigate through other management practices, dispersed camping, within 100 feet (or high water mark) of lakes larger than ¼ acre, and perennial streams that are:
    a. State-listed water quality impaired streams
    b. Along the mainstem of the 6th-level municipal watersheds of Clear Creek, Goose Creek, Tensleep Creek, Shell Creek, Tongue River.
2. Require overnight campers with recreational livestock to carry feed where forage is limited. Feed shall be free of noxious weed seeds. (Reference FSM 2323.38 and FSH 2309.19-33)

Guidelines

1. Take the following management actions, in order of priority, if use degrades the desired recreation experience as identified in the given ROS class or if the impact of use exceed the specified criterion identified in the Limits of Acceptable Change (LAC):
    a. Educate the public on the issue.
    b. Control access through design.
    c. Regulate season of use.
    d. Restrict the number of users.
    e. Restore or rehabilitate the site.
    f. Close the area or site.
2. Do not allow dispersed camping within ¼ mile of developed campground facilities unless otherwise designated.
3. Concentrate dispersed sites into areas already impacted. Site management should be consistent with the recreation setting and may include hardening, site pads or dispersed camping designation. Rehabilitate, or otherwise mitigate, when one or more of the following conditions exist:
    a. Unacceptable damage is occurring.
    b. Effects of site occupancy exceed the adopted scenic integrity objective.
    c. There are social use conflicts.
4. Evaluate existing dispersed sites within 100 feet of streams or lakes for hardening, closure, or other mitigation. New sites should not be established in these areas.

Scenery Management

Guidelines

1. Integrate the protection of aesthetic values with all resource planning. Management activities will be consistent with the SIOs and landscape character goals unless otherwise documented in a NEPA decision.
2. Initiate scenery mitigation within one year in high and moderate SIO areas and within three years in low SIO areas.
3. For areas that do not currently meet the SIO, use the interim objective of "rehabilitation." Rehabilitate existing projects and areas that do not meet the SIOs specified for the area. Set priorities for rehabilitation considering the following:
    a. Relative importance of the area and the amount of deviation from the scenic integrity objectives.
    b. Length of time it will take natural processes to reduce the scenic impacts so they meet the scenic integrity objective.
    c. Length of time it will take rehabilitation measures to meet the scenic integrity objective.
    d. Benefits to other resource management objectives to accomplish rehabilitation.
4. Plan, design, and locate vegetative manipulation in a scale that retains the color and texture of the landscape character, borrowing directional emphasis of form and line from natural features.
5. Choose facility and structure design, color of materials, location, and orientation to meet the SIO and landscape character goals for the area. Refer to the BEIG.
6. At the project scale, use scenery analysis to refine or correct the scenic integrity objective as defined in the management area guidelines. Any changes will be disclosed in the environmental analysis document with a map and description.
7. Within the seen area of scenic byways and developed recreation sites, maintain quality scenery and recreation experiences while managing forest vegetation to provide vegetative diversity. The highest priorities for protection of scenic quality are scenic byways and developed recreation sites.

Wilderness Resources

Standards

1. Do not provide interpretive facilities at cultural sites nor restore or enhance cultural resources for recreation purposes.
2. Utilize a permit system to manage use levels (as defined by combination of area-wide or trail capacities, trail encounters, and maximum sites occupied at one time) and patterns during the summer use period based upon the following criteria:
    a. When acceptable use levels, as specified in the individual prescriptions, are exceeded during 20% of the summer use season.
    b. When acceptable capacities, as specified in the individual prescriptions, in primitive or pristine management areas are exceeded on 10% or more of the days during the summer use season.
    c. Apply a permit system to an entire wilderness, not just impacted portions of a wilderness.
3. Prohibit competitive contest events, group demonstrations, ceremonies, and other similar events.
4. Prohibit recreational stock along lakeshores and stream banks except for watering and through-travel.
5. Require users camping overnight with recreational stock to carry cubed, pelleted, or rolled feed and/or certified weed-free hay where grazing is prohibited.
6. Control grazing of recreational stock to maintain natural processes wherever recreational stock grazing may occur and where utilization standards and guidelines are exceeded.
7. Prohibit new permanent rangeland improvement structures other than corrals, fences, or water development. Any new structures must help sustain permitted numbers or protect resource values.
8. If current permits are relinquished or terminated, evaluate options to minimize impacts (minimum tool evaluation).
9. Implement revegetation for rehabilitation of areas where natural vegetation possibilities are poor, and only where degradation was due to human activities. Use only genetically local (at the subsection level) native or indigenous species for revegetation.
10. Control natural insect or disease outbreaks in wilderness only when justified by predicted loss of resource values outside of wilderness.

11. Control problem animals on a case-by-case basis in cooperation with other agencies (FSM 2610) using methods directed at the offending animal but which present the least risk to other wildlife, and/or visitors.
12. Do not allow dogs to harass people, livestock, or wildlife.
13. Do not move or encourage use into more pristine areas to resolve impacts in semi-primitive areas.
14. Use natural appearing construction techniques to protect wetlands if alternate trail locations are unavailable.

Guidelines

1. Where appropriate, provide printed information at trailheads outside the wilderness.
2. Emphasize minimum impact suppression techniques in all wilderness wildland fire responses.
3. Use “minimum tools” to accomplish project work.
4. Limit the total party size to 10 people and 15 head of recreational stock, with an allowance of an additional two (2) people if one member of the party is certified in “Leave No Trace" and has a copy of their certificate in possession. In extremely rare instances, allow parties larger than established limits under permit on a case-by-case basis when compatible with other wilderness management objectives.

Administrative

Infrastructure – Dams and Diversions

Standard
1. Ensure that all embankments higher than six feet and impounding more than 15 acre-feet of water meet Forest Service Manual requirements for dam construction, safety, and compliance with state and federal regulations.

Infrastructure – Facilities

Standard
1. Manage all facilities according to the FMP.

Guidelines
1. Do not retain facilities acquired from land donation, exchange, or purchase unless they serve a definite future purpose and funding is available for their maintenance.
2. Manage facilities according to the BEIG.

Infrastructure – Travelways

Standards
1. Manage forest system roads and trails using the following criteria:
    a. Use shall conform with forest plan and road/trail management objectives.
    b. System roads and trails shall serve an existing or identified use or public need.
    c. Close or decommission route if:
        i. Unacceptable damage will likely occur to soil, wildlife, flora cultural, aquatic, or other resources.
        ii. Financing or partnerships are not available to perform critical maintenance.
2. On all lands outside designated travelways, prohibit motorized travel unless the Forest Visitor Map or a Forest Order indicates that such use is specifically allowed. Allow over-snow vehicle use on snow unless specifically restricted.
3. Prohibit motorized access from private land where access for the general public is not available, except by special authorization.
4. Protect or enhance trails that have been identified for retention as part of the designated travelway system during other resource projects. To maintain the desired recreation experience, relocate, reconstruct, or otherwise keep functional those trails disrupted by other management activities.

Guidelines

1. Work toward integrating trail systems with other government entities, land owners, and partners.
2. Install designed stream crossing structures where system travelways with motorized use cross perennial streams. Prioritize implementation on impaired streams and municipal watersheds.
3. Use restricted roads and trails (those roads or trails with use restricted by method of travel, or season of use, etc.), when necessary, to accomplish administrative purposes in the following circumstances:
    a. When prescribed in management prescriptions.
    b. When authorized by the Forest Supervisor/District Ranger.
    c. In case of emergency.
4. Manage road or trail use by seasonal closure if:
    a. Use causes unacceptable damage to soil and water resources due to weather or seasonal conditions.
    b. Use causes unacceptable wildlife conflict or habitat degradation.
    c. Use results in unsafe conditions due to weather conditions.
    d. The road(s) or trail(s) serve a seasonal public or administration need.
    e. The area accessed has seasonal need for protection or non-use.
5. Provide a wide range of recreation opportunities on existing and new (non-wilderness) trail systems, including a variety of motorized and nonmotorized accessibility and difficulty levels.
    a. Dedicate trails to a single use where clearly necessary to resolve conflicts. Where there are conflicts, decide which trails are available for separate uses and which are to be shared.
    b. Consider a wide range of universally accessible opportunities for all new construction or rehabilitation proposals.
    c. Clearly communicate appropriate modes of travel at each trailhead.

Infrastructure – Travelways guidelines, cont.

6. Meet a scenic integrity objective of "high" (management activities are not evident to the casual viewer and the area appears natural) within the foreground for all National Scenic and Recreation trails (i.e., Bucking Mule Falls).
7. Retrofit culverts or other drainage structures as necessary to allow continued beaver use in roaded riparian areas where drainage problems occur. Should beaver need to be removed, arrange for live trapping and moving the animal(s) to another more suited location.
8. Do not construct timber sale roads to higher standards than those required to meet the needs of timber production, unless other needs are identified.

Real Estate – Land Adjustments

Standard

1. In land adjustment activities (including land exchange, purchase, disposal, donation), consider the following:
    a. Evaluate and balance the overall combination of all resource values and factors including wildlife habitat, fisheries habitat, riparian areas, wetlands, cultural resources, recreation opportunities, scenic value, watershed protection, timber resources, rangelands, public access, better federal land management, and other factors.
    b. Consider the effect of land adjustments on sensitive species habitat. Avoid land adjustments that could results in a trend toward federal listing, or loss of population viability for any sensitive species. Convey sensitive species habitat if conveyance would not result in a trend toward federal listing or adversely impact the population viability of the species, or if effects could be mitigated.
    c. Acquire lands that contain resource values identified during scoping as important in contributing toward National Forest System resource management goals and objectives as stated in the forest plan. Examples include wetlands, riparian areas, essential wildlife habitat, threatened or endangered species habitat, sensitive species habitat, significant cultural resources, timber lands, rangelands, and recreation access or values.

Guidelines

1. In land adjustment activities (including land exchange, purchase, disposal, donation), consider the following:
    a. Reduction of Forest Service administrative costs and improvement of management efficiency. This includes: reducing miles of landline boundaries and number of corners, eliminating potential encroachments, special uses, title claims, rights-of-way grants and easements, numbers of allotments and intermingled ownership livestock pastures, and other factors which decrease administrative costs and improve management efficiency.
    b. Reduction of conflicts between Forest Service and private landowner objectives, especially when conflicts are adversely impacting National Forest System management.
2. Evaluate the following when considering opportunities to acquire non-federal lands by purchase or exchange where lands are valuable for National Forest System purposes:
    a. Lands in designated wilderness areas and other Congressionally classified areas.
    b. Lands with important heritage resources, important paleontological or geologic sites, outstanding scenic values, or critical ecosystems when these resources are threatened by change of use, or when management may be enhanced by public ownership.
    c. Lakes, streams, flood plains, wetlands, and riparian ecosystems.
    d. Lands with important botanical, wildlife and fishery management areas. This includes lands that provide habitat for threatened, endangered, or sensitive animals or plants, and rare plant communities.
    e. Lands needed to protect resource values by eliminating or reducing fire risks or soil erosion.
    f. Lands needed to consolidate existing National Forest System lands.
    g. Avoidance of land acquisition where it is likely that the lands will go to patent under the 1872 Mining Law unless the minerals will be donated to the United States.
    h. Lands that will add significantly to available National Forest goods and services.

Real Estate – Land Adjustments guidelines, cont

2., cont.

i. Lands needed to acquire necessary access.

j. Lands in a municipal supply watershed when:

i. The community does not have the capability to acquire the essential tract

ii. The National Forest ownership would protect against existing or potential uses that are incompatible with effective watershed management.

iii. The lands are suitable and will be used for other National Forest programs in addition to watershed protection

a. Lands with improvements suitable for National Forest purposes.

b. Lands with cave resources.

c. Lands with important outdoor recreation values.

3. Evaluate the following when considering opportunities to dispose of lands:

a. Lands in developed areas that have lost or are losing their National Forest character.

b. To states, counties, cities, or other federal agencies when disposal will serve a greater public interest, than retention in federal ownership.

c. Lands suitable for development by the private sector, when development (such as residential, agricultural, industrial, or recreational) will not adversely affect management of adjoining NFS land.

d. Lands isolated from other NFS lands.

e. Reserved or acquired road rights-of-way parcels that are substantially surrounded by private lands and are no longer needed.

f. In parcels intermingled with mineral or homestead patents.

3., cont.

g. Lands encumbered by special use permits and occupied by substantial structural improvements that no longer serve a greater public need.

h. Lands encumbered with occupancy trespass cases and encroachments involving substantial structural improvements.

Real Estate – Rights-of-Way

Standard

1. Retain existing access rights, where needed, to meet forest plan goals and objectives.
2. Obtain reasonable public and administrative access to all NFS lands in the following ways:
   a. Require reciprocal grants, where needed, when granting rights-of-way easements across NFS lands.
   b. Reserve in land disposal action, existing and designated inventoried rights-of-way that are needed for implementation of the management plan and to protect them for future construction and occupancy.

Guidelines

1. Acquire rights-of-way to provide general unrestricted access for full public use and management activities where needed.
2. Actively pursue access rights where needed to meet forest plan goals and objectives.
3. Where needed, post signs indicating the location of landlines and the National Forest boundary.

Lands – Special Uses

Standard

1. Do not approve special use applications for areas adjacent to developed sites unless the proposed use is compatible with the purpose and use of the developed site.

Guidelines

1. Do not approve land use authorizations on NFS lands identified for disposal if that occupancy may affect disposal action.
2. Consider special use proposals according to the following priorities:
   a. Activity requests relating to public safety, health, and welfare (e.g. highways, powerlines, and public service improvements).

b. Land and land use activities contributing to increased economic activity associated with NFS resources (e.g., oil and gas and energy minerals).

c. Land and land use activities that benefit only private users (e.g., road permits, rights-of-way for power lines, telephone lines, waterlines, etc.).

Transportation and Utility Corridors

Standards

1. Design new or replacement power lines to reduce the risk of electrocuting raptors. Refer to *Suggested Practices for Raptor Protection on Power Lines* (APLIC 1996) or equivalent measures.
2. Conserve existing and designated inventoried utility corridors identified in the forest plan to protect them for future construction and occupancy.
3. Require burial of new, relocated, or reconstructed telephone lines and electrical utility lines (of 33 kilovolts of less) unless it is not technically feasible.

Guidelines

1. Consolidate occupancy of transportation or utility corridors and sites wherever possible and compatible.
2. Route overhead power lines in a manner that minimizes visual impacts and conforms to approved corridors.
3. To the extent possible, manage activities within linear corridors to be compatible with the goals of the individual management area prescriptions through which corridors pass.
4. In areas occupied by sage grouse, discourage raptor use of power lines (anti-perching devices or similar measures) to avoid excess predation on sage grouse.
5. Consider existing and designated inventories rights-of-way that are identified in the *Western Utility Study*, during the development of corridor studies.
6. Require burial of existing telephone lines and electrical utility lines (of 33 kilovolts or less) at the earliest opportunity.